

VWR[®] for electrophoresis

01. NUCLEIC ACID
ELECTROPHORESIS

02. PROTEIN
ELECTROPHORESIS

03. BLOTTING

04. BIO IMAGING



VWR® for electrophoresis

Welcome to the VWR branded range of products for electrophoresis

For many of us running our first gel has been something like a 'key initiation' when starting our lab careers. Since then various new techniques for analysing nucleic acids and proteins have been developed and established. However, horizontal and vertical gel electrophoresis still is a powerful tool, indispensable in life science research around the world. We have, therefore, worked hard to make our range of electrophoresis solutions even more complete, and to further improve the performance and quality of the individual products.

Exploring this catalogue you will find electrophoresis and blotting systems which are loaded with sensible, well designed features, and which will easily become well loved, essential and dependable tools in your hands. Adjacent to the equipment chapters, reagents are illustrated that are needed to separate or transfer, stain and analyse your samples. The bio imaging chapter will then give you access to our high quality range of gel documentation and Western blot imaging systems for the easy detection of even the faintest bands. Finally, a selection of helpful complementary products like shakers, gel-loading tips and bench protection make this brochure complete, helping scientists running and analysing their gels throughout the coming decades.

Your VWR Life Science Team



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From sample to sequence

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Overview PerfectBlue horizontal electrophoresis systems

System	Gel size (W x L)	Maximal number of samples	Buffer volume	Gel volume*	Combs**	Cat. No.
PerfectBlue Mini S	7 x 8 cm	24	400 ml	30 ml	6, 10	700-0741
PerfectBlue Mini M	9 x 11 cm	36	600 ml	50 ml	10, 14	700-0758
PerfectBlue Mini L	12 x 14 cm	50	800 ml	85 ml	12***	700-0777
PerfectBlue Mini L 'Revolution'	12 x 14 cm	50	1000 ml	85 ml	12***	700-0799
PerfectBlue Midi S	15 x 15 cm	160	1000 ml	120 ml	17, 34 (2 each)***	700-0814
PerfectBlue Midi ExW	23 x 14 cm	200	1400 ml	160 ml	50 (4x)***	700-0842
PerfectBlue Maxi S Plus	15 x 25 cm	160	1800 ml	200 ml	10, 17***, 34***	700-0876
PerfectBlue Maxi M	20 x 25 cm	168	2300 ml	250 ml	16, 24, 36	700-0880
PerfectBlue Maxi M 'Revolution'	20 x 25 cm	168	2000 ml	250 ml	16, 24, 36	700-0909
PerfectBlue Maxi L	23 x 40 cm	600	4500 ml	460 ml	25, 50 (2 each)***	700-0913
PerfectBlue Maxi ExW	23 x 25 cm	500	3000 ml	290 ml	25, 50 (2 each)***	700-0910
PerfectBlue Maxi ExW 'Revolution'	23 x 25 cm	500	2800 ml	290 ml	25, 50 (2 each)***	700-0912

* refers to gels with a thickness of 5 mm

** number of teeth, combs supplied with the respective system

*** microtiter combs



PERFECTBLUE GEL SYSTEM, MINI S

The smallest of all the PerfectBlue electrophoresis systems, the Mini S can be used for up to 24 samples enabling short and rapid sample separation. This model includes all the features of the larger models, including direct chamber gel casting and embedded platinum electrodes, and is supplied ready to use with lid, power leads, two combs and a gel tray with an easy to read ruler.

Gel size (W×L): 70×80 mm

System is supplied with 2 combs (6 and 10 teeth, 1,5 mm thickness) as standard.

Model	Mini S
Gel size W×L (mm)	70×80
Gel volume (ml)	~30*
Buffer volume (ml)	~400
Run time (min)	≥30
Unit W×L×H (mm)	120×160×95

Description	Pk	Cat. No.
PerfectBlue gel system Mini S	1	700-0741

Description	Pk	Cat. No.
Combs for PerfectBlue gel system Mini S		
Standard comb, 1,0 mm, 5 teeth, 42 µl*	1	700-0746
Standard comb, 1,5 mm, 5 teeth, 64 µl*	1	700-0747
Standard comb, 1,0 mm, 6 teeth, 34 µl*	1	700-0748
Standard comb, 1,5 mm, 6 teeth, 51 µl*	1	700-0749
Standard comb, 1,0 mm, 8 teeth, 24 µl*	1	700-0750
Standard comb, 1,5 mm, 8 teeth, 36 µl*	1	700-0751
Standard comb, 1,0 mm, 10 teeth, 18 µl*	1	700-0742
Standard comb, 1,5 mm, 10 teeth, 26 µl*	1	700-0743
Standard comb, 1,0 mm, 12 teeth, 14 µl*	1	700-0744
Standard comb, 1,5 mm, 12 teeth, 21 µl*	1	700-0745
Preparative comb, 1,5 mm, 2 teeth, 320/28 µl*	1	700-0756
Accessories		
Casting chamber for max. 3 gels	1	700-0753
UV transparent gel tray with gaskets	1	700-0757
Replacement gaskets for gel tray	1 PAIR	700-0754

*Based on an agarose gel of approximately 5 mm thickness



PERFECTBLUE GEL SYSTEM, MINI M

The PerfectBlue Mini M electrophoresis system is a very convenient size for a wide range of routine uses. Supplied with two combs, but with a wide range of standard and microtitre combs available, this system can be used for the separation of up to 36 samples. The system comes 'ready to use' with lid, power leads and a gel tray. Its high specification construction and embedded platinum electrodes provide high quality results time after time.

System is supplied with 2 combs (10 and 14 teeth, 1,5 mm thickness) as standard.

Model	Mini M
Gel size W×L (mm)	9 × 11 cm
Buffer volume (ml)	600 mL
Run time (min)	≥45
Unit W×L×H (mm)	90 × 110 × 95

Description	Pk	Cat. No.
PerfectBlue gel system Mini M	1	700-0758

Description	Pk	Cat. No.
Combs for PerfectBlue gel system Mini M		
Standard comb, 1,0 mm, 5 teeth, 58 µl*	1	700-0767
Standard comb, 1,5 mm, 5 teeth, 86 µl*	1	700-0768
Standard comb, 1,0 mm, 8 teeth, 34 µl*	1	700-0769
Standard comb, 1,5 mm, 8 teeth, 51 µl*	1	700-0770
Standard comb, 1,0 mm, 10 teeth, 25 µl*	1	700-0759
Standard comb, 1,5 mm, 10 teeth, 38 µl*	1	700-0760
Standard comb, 1,0 mm, 12 teeth, 20 µl*	1	700-0761
Standard comb, 1,5 mm, 12 teeth, 30 µl*	1	700-0762
Standard comb, 1,0 mm, 14 teeth, 16 µl*	1	700-0763
Standard comb, 1,5 mm, 14 teeth, 25 µl*	1	700-0764
Microtitre comb, 1,0 mm, 9 teeth, 27 µl*	1	700-0771
Microtitre comb, 1,5 mm, 9 teeth, 40 µl*	1	700-0772
Microtitre comb, 1,0 mm, 18 teeth, 11 µl*	1	700-0765
Microtitre comb, 1,5 mm, 18 teeth, 16 µl*	1	700-0766
Preparative comb, 1,5 mm, 2 teeth, 439/28 µl*	1	700-0775
Accessories		
Casting chamber for max. 3 gels	1	700-0773
UV transparent gel tray with gaskets	1	700-0776
Replacement gaskets for gel tray	1 PAIR	700-0774

*Based on an agarose gel of approximately 5 mm thickness



PERFECTBLUE GEL SYSTEM, MINI L

Capable of running 12×14 cm gels, the largest of the ‘Mini’ range still offers the convenience of direct gel casting in the tray, in an easy to manage product size for reliable, high quality electrophoresis. This system can be supplied with a choice of gel trays suitable for 2, 4 or 12 combs, and an expansive range of standard and microtitre combs, making this versatile system appropriate for both routine and small separation electrophoresis.

System is supplied with gasketed UV transmissible (UVT) gel tray (L4) with 4 comb positions and 2 combs (12 and 20 teeth, 1,5 mm thickness) as standard.

Model	Mini L
Gel size W×L (mm)	120×140
Sample capacity	8 – 100
Gel volume (ml)	~85*
Buffer volume (ml)	~800
Run time (min)	≥60
Unit W×L×H (mm)	170×250×95

Description	Pk	Cat. No.
PerfectBlue gel system Mini L	1	700-0777

Description	Pk	Cat. No.
Combs for PerfectBlue gel system Mini L		
Standard comb, 1,0 mm, 8 teeth, 47 µl*	1	700-0788
Standard comb, 1,5 mm, 8 teeth, 70 µl*	1	700-0789
Standard comb, 1,0 mm, 16 teeth, 20 µl*	1	700-0780
Standard comb, 1,5 mm, 16 teeth, 30 µl*	1	700-0781
Standard comb, 1,0 mm, 20 teeth, 15 µl*	1	700-0782
Standard comb, 1,5 mm, 20 teeth, 22 µl*	1	700-0783
Standard comb, 1,0 mm, 24 teeth, 11 µl*	1	700-0784
Standard comb, 1,5 mm, 24 teeth, 17 µl*	1	700-0785
Microtitre comb, 1,0 mm, 9 teeth, 27 µl*	1	700-0790
Microtitre comb, 1,5 mm, 9 teeth, 40 µl*	1	700-0791
Microtitre comb, 1,0 mm, 12 teeth, 27 µl*	1	700-0778
Microtitre comb, 1,5 mm, 12 teeth, 40 µl*	1	700-0779
Microtitre comb, 1,0 mm, 25 teeth, 11 µl*	1	700-0786
Microtitre comb, 1,5 mm, 25 teeth, 16 µl*	1	700-0787
Preparative comb, 1,5 mm, 2 teeth, 596/28 µl*	1	700-0795
Accessories		
Casting chamber for max. 3 gels	1	700-0792
Gaskets	1 PAIR	700-0793
Gel tray L12, UV transparent gel tray with gaskets, for up to 12 combs	1	700-0796
Gel tray L4, UV transparent gel tray with gaskets, for up to 4 combs	1	700-0797

*Based on an agarose gel of approximately 5 mm thickness



PERFECTBLUE GEL SYSTEM, MINI L ‘REVOLUTION’

The ‘Revolution’ series includes a buffer circulation system, powered by the electrodes themselves. Hydrogen bubbles produced at the cathode pass up a diagonally positioned pipe connected to the two sides of the tank producing a gentle circulation of the buffer. The result is no pH and ionic gradient – without need of mechanical pumps.

System is supplied with 2 combs (12 and 20 teeth, 1,5 mm thickness) as standard.

Model	Mini L Revolution
Gel size W×L (mm)	120×140
Sample capacity	8 – 100
Gel volume (ml)	85*
Buffer volume (ml)	~800
Run time (min)	≥60
Unit W×L×H (mm)	170×250×95

Description	Pk	Cat. No.
PerfectBlue gel system Mini L ‘Revolution’	1	700-0799

Description	Pk	Cat. No.
Combs for PerfectBlue gel system Mini L		
Standard comb, 1,0 mm, 8 teeth, 47 µl*	1	700-0788
Standard comb, 1,5 mm, 8 teeth, 70 µl*	1	700-0789
Standard comb, 1,0 mm, 16 teeth, 20 µl*	1	700-0780
Standard comb, 1,5 mm, 16 teeth, 30 µl*	1	700-0781
Standard comb, 1,0 mm, 20 teeth, 15 µl*	1	700-0782
Standard comb, 1,5 mm, 20 teeth, 22 µl*	1	700-0783
Standard comb, 1,0 mm, 24 teeth, 11 µl*	1	700-0784
Standard comb, 1,5 mm, 24 teeth, 17 µl*	1	700-0785
Microtitre comb, 1,0 mm, 9 teeth, 27 µl*	1	700-0790
Microtitre comb, 1,5 mm, 9 teeth, 40 µl*	1	700-0791
Microtitre comb, 1,0 mm, 12 teeth, 27 µl*	1	700-0778
Microtitre comb, 1,5 mm, 12 teeth, 40 µl*	1	700-0779
Microtitre comb, 1,0 mm, 25 teeth, 11 µl*	1	700-0786
Microtitre comb, 1,5 mm, 25 teeth, 16 µl*	1	700-0787
Preparative comb, 1,5 mm, 2 teeth, 596/28 µl*	1	700-0795
Accessories		
Casting chamber for max. 3 gels	1	700-0792
Gaskets	1 PAIR	700-0793
Gel tray L12, UV transparent gel tray with gaskets, for up to 12 combs	1	700-0796
Gel tray L4, UV transparent gel tray with gaskets, for up to 4 combs	1	700-0797

*Based on an agarose gel of approximately 5 mm thickness



PERFECTBLUE GEL SYSTEM, MIDI S

Capable of rapidly running up to 160 samples, the Midi S is a compact, but highly efficient, electrophoresis system. Versatility is built-in, with six different comb positions and a choice of 10 different comb types and thicknesses available. For rapid handling, special microtitre combs enable rapid loading with a multichannel pipette, while the effective rubber sealed ‘end gates’ allow gel pouring right in the tray. With its sturdy design and straight electrodes, the results are clear, crisp and quick, free from ‘smiling’ bands.

Supplied with 4 combs (1,5 mm thickness, 2×17 and 2×34 teeth), lid, gel tray, tank, cables and ‘end gates’ for gel pouring.

Model	Midi S
Gel size W×L (mm)	150×150
Sample capacity	10 – 160
Gel volume (ml)	~120*
Buffer volume (ml)	~1000
Run time (min)	≥45
Unit W×L×H (mm)	215×275×100

Description	Pk	Cat. No.
PerfectBlue gel system Midi S	1	700-0814

Description	Pk	Cat. No.
Combs for PerfectBlue gel system Midi S and Maxi S Plus		
Standard comb, 1,0 mm, 10 teeth, 30 µl*	1	700-0815
Standard comb, 1,5 mm, 10 teeth, 46 µl*	1	700-0816
Standard comb, 1,0 mm, 20 teeth, 13 µl*	1	700-0817
Standard comb, 1,5 mm, 20 teeth, 20 µl*	1	700-0818
Standard comb, 1,0 mm, 40 teeth, 5 µl*	1	700-0819
Standard comb, 1,5 mm, 40 teeth, 7 µl*	1	700-0820
Microtitre comb, 1,0 mm, 34 teeth, 6 µl*	1	700-0825
Microtitre comb, 1,5 mm, 34 teeth, 9 µl*	1	700-0826
Microtitre comb, 1,0 mm, 17 teeth, 16 µl*	1	700-0827
Microtitre comb, 1,5 mm, 17 teeth, 24 µl*	1	700-0828
Accessories		
Casting dam, aluminium, for shorter gel length	1	700-0821
End gates, for gel pouring	1 PAIR	700-0822
Replacement gaskets for end gates	1 PAIR	700-0823
UV transparent gel tray with end gates (Midi S)	1	700-0829

*Based on an agarose gel of approximately 5 mm thickness



PERFECTBLUE WIDE FORMAT GEL SYSTEM, MIDI EXW

With its extra wide design, the Midi ExW is ideal when there is a need to run lots of samples (up to 200) in just a short distance, for example, when genotyping. This format, along with its compact footprint, offers rapid run times without compromising on power. The result is a system for high throughput sample processing, generating crisp clear band data. As with all PerfectBlue gel systems, gels can be poured directly in the trays at temperatures up to +60 °C. With the Midi ExW, the trays can be walled with effective gasketed ‘end gates’ which are supplied in the system. In addition, gel size can be reduced by using wall combs or the aluminium casting dam.

Each system is supplied with four microtitre combs (1,5 mm thick, 50 teeth), lid, gel tray, tank, cables and end gates for gel pouring.

Model	Midi ExW
Gel size W×L (mm)	230×140
Sample capacity	25 – 200
Gel volume (ml)	160*
Buffer volume (ml)	~1400
Run time (min)	≥45
Unit W×L×H (mm)	260×290×100

Description	Pk	Cat. No.
PerfectBlue wide format gel system Midi ExW	1	700-0842

Description	Pk	Cat. No.
Combs for PerfectBlue wide format gel system Midi ExW		
Microtitre comb, 1,0 mm, 25 teeth, 27 µl*	1	700-0838
Microtitre comb, 1,5 mm, 25 teeth, 40 µl*	1	700-0839
Microtitre comb, 1,0 mm, 26 teeth, 27 µl*	1	700-0831
Microtitre comb, 1,5 mm, 26 teeth, 40 µl*	1	700-0832
Microtitre comb, 1,0 mm, 50 teeth, 11 µl*	1	700-0836
Microtitre comb, 1,5 mm, 50 teeth, 16 µl*	1	700-0837
Accessories		
Casting dam, aluminium, for shorter gel length	1	700-0833
Gel tray with end gates	1	700-0845

*Based on an agarose gel of approximately 5 mm thickness



PERFECTBLUE GEL SYSTEM, MAXI S PLUS

The smallest of the Maxi series, the Maxi S Plus is suitable for high quality sample separation of up to 160 samples per run. With this flexible system, the gel size can be split into two, three or four sections by using different comb positions, plus the gel size can be reduced using the wall comb or the casting dam system.

The system is supplied with three combs but others are available – either standard combs, or microtitre combs which are ideal for use with multichannel pipettes. Use of the system end gates ensure that gel pouring is leak-free and easy. The levelling table keeps the resulting gel flat, maximising the quality of the run.

Supplied with 3 combs (1,5 mm thickness, 10, 17, 34 teeth), lid, gel tray, 3-point levelling platform, tank, cables and end gates.

Model	Maxi S Plus
Gel size W×L (mm)	150×250
Sample capacity	10 – 160
Gel volume (ml)	200*
Buffer volume (ml)	~1800
Run time (min)	≥60
Unit W×L×H (mm)	230×375×105

Description	Pk	Cat. No.
PerfectBlue gel system Maxi S Plus	1	700-0876

Description	Pk	Cat. No.
Combs for PerfectBlue gel system Midi S and Maxi S Plus		
Standard comb, 1,0 mm, 10 teeth, 30 µl*	1	700-0815
Standard comb, 1,5 mm, 10 teeth, 46 µl*	1	700-0816
Standard comb, 1,0 mm, 20 teeth, 13 µl*	1	700-0817
Standard comb, 1,5 mm, 20 teeth, 20 µl*	1	700-0818
Standard comb, 1,0 mm, 40 teeth, 5 µl*	1	700-0819
Standard comb, 1,5 mm, 40 teeth, 7 µl*	1	700-0820
Microtitre comb, 1,0 mm, 34 teeth, 6 µl*	1	700-0825
Microtitre comb, 1,5 mm, 34 teeth, 9 µl*	1	700-0826
Microtitre comb, 1,0 mm, 17 teeth, 16 µl*	1	700-0827
Microtitre comb, 1,5 mm, 17 teeth, 24 µl*	1	700-0828
Accessories		
Casting dam, aluminium, for shorter gel length	1	700-0821
End gates, for gel pouring	1 PAIR	700-0822
Replacement gaskets for end gates	1 PAIR	700-0823
UV transparent gel tray with end gates (Maxi S Plus)	1	700-0878

*Based on an agarose gel of approximately 5 mm thickness.



PERFECTBLUE GEL SYSTEM, MAXI M

Wider than the Maxi S Plus, the Maxi M model can accommodate up to 168 samples but still with an economical footprint.

Supplied with 3 combs (1,5 mm thickness, 16, 24, 36 teeth), lid, gel tray, 3-point levelling platform, end gates, tank and cables.

Model	Maxi M
Gel size W×L (mm)	200×250
Sample capacity	8 – 168
Gel volume (ml)	250*
Buffer volume (ml)	~2300
Run time (min)	≥60
Unit W×L×H (mm)	290×370×100

Description	Pk	Cat. No.
PerfectBlue gel system Maxi M	1	700-0880

Description	Pk	Cat. No.
Combs for PerfectBlue gel system Maxi M		
Microtitre comb, 1,0 mm, 18 teeth, 27 µl*	1	700-0885
Microtitre comb, 1,0 mm, 21 teeth, 27 µl*	1	700-0904
Microtitre comb, 1,0 mm, 42 teeth, 11 µl*	1	700-0902
Microtitre comb, 1,5 mm, 18 teeth, 40 µl*	1	700-0886
Microtitre comb, 1,5 mm, 42 teeth, 16 µl*	1	700-0903
Standard comb, 1,0 mm, 12 teeth, 54 µl*	1	700-0881
Standard comb, 1,0 mm, 16 teeth, 54 µl*	1	700-0883
Standard comb, 1,0 mm, 20 teeth, 30 µl*	1	700-0887
Standard comb, 1,0 mm, 24 teeth, 24 µl*	1	700-0889
Standard comb, 1,0 mm, 28 teeth, 19 µl*	1	700-0891
Standard comb, 1,0 mm, 32 teeth, 15 µl*	1	700-0893
Standard comb, 1,0 mm, 36 teeth, 13 µl*	1	700-0895
Standard comb, 1,0 mm, 8 teeth, 85 µl*	1	700-0897
Standard comb, 1,5 mm, 12 teeth, 82 µl*	1	700-0882
Standard comb, 1,5 mm, 16 teeth, 39 µl*	1	700-0884
Standard comb, 1,5 mm, 20 teeth, 45 µl*	1	700-0888
Standard comb, 1,5 mm, 24 teeth, 37 µl*	1	700-0890
Standard comb, 1,5 mm, 28 teeth, 28 µl*	1	700-0892
Standard comb, 1,5 mm, 32 teeth, 22 µl*	1	700-0894
Standard comb, 1,5 mm, 36 teeth, 20 µl*	1	700-0896
Standard comb, 1,5 mm, 8 teeth, 127 µl*	1	700-0898
Accessories		
Casting dam, aluminium, for shorter gel length	1	700-0899
End gates, for gel pouring	1 PAIR	700-0900
Replacement gaskets for end gates	1 PAIR	700-0901
UV transparent gel tray with end gates	1	700-0907

*Based on an agarose gel of approximately 5 mm thickness.



PERFECTBLUE GEL SYSTEM, MAXI M 'REVOLUTION'

Based on the Maxi M model, the Maxi M 'Revolution' offers a built-in buffer circulation system, powered by the system's electrodes. At the cathode, hydrogen bubbles are produced and pass up a diagonally positioned pipe connected to the two sides of the tank to produce a gentle and continual circulation of the buffer. The system nulls any pH and ionic gradient – without the fuss of mechanical pumps. The system offers 6 comb positions enabling the gel to be partitioned into 2, 3 or 4 areas. In addition, the system can accommodate any of the 23 standard and microtitre comb designs described for the Maxi M model.

Supplied with 3 combs (1,5 mm thickness, 16, 24, 36 teeth), lid, gel tray, 3-point levelling platform, end gates, tank and cables.

Model	Maxi M 'Revolution'
Gel size W×L (mm)	200×250
Sample capacity	8 – 168
Gel volume (ml)	250*
Buffer volume (ml)	~2000
Run time (min)	≥60
Unit W×L×H (mm)	270×380×155

Description	Pk	Cat. No.
PerfectBlue gel system Maxi M 'Revolution'	1	700-0909

Description	Pk	Cat. No.
Combs for PerfectBlue gel system Maxi M		
Microtitre comb, 1,0 mm, 18 teeth, 27 µl*	1	700-0885
Microtitre comb, 1,0 mm, 21 teeth, 27 µl*	1	700-0904
Microtitre comb, 1,0 mm, 42 teeth, 11 µl*	1	700-0902
Microtitre comb, 1,5 mm, 18 teeth, 40 µl*	1	700-0886
Microtitre comb, 1,5 mm, 42 teeth, 16 µl*	1	700-0903
Standard comb, 1,0 mm, 12 teeth, 54 µl*	1	700-0881
Standard comb, 1,0 mm, 16 teeth, 54 µl*	1	700-0883
Standard comb, 1,0 mm, 20 teeth, 30 µl*	1	700-0887
Standard comb, 1,0 mm, 24 teeth, 24 µl*	1	700-0889
Standard comb, 1,0 mm, 28 teeth, 19 µl*	1	700-0891
Standard comb, 1,0 mm, 32 teeth, 15 µl*	1	700-0893
Standard comb, 1,0 mm, 36 teeth, 13 µl*	1	700-0895
Standard comb, 1,0 mm, 8 teeth, 85 µl*	1	700-0897
Standard comb, 1,5 mm, 12 teeth, 82 µl*	1	700-0882
Standard comb, 1,5 mm, 16 teeth, 39 µl*	1	700-0884
Standard comb, 1,5 mm, 20 teeth, 45 µl*	1	700-0888
Standard comb, 1,5 mm, 24 teeth, 37 µl*	1	700-0890
Standard comb, 1,5 mm, 28 teeth, 28 µl*	1	700-0892
Standard comb, 1,5 mm, 32 teeth, 22 µl*	1	700-0894
Standard comb, 1,5 mm, 36 teeth, 20 µl*	1	700-0896
Standard comb, 1,5 mm, 8 teeth, 127 µl*	1	700-0898
Accessories		
Casting dam, aluminium, for shorter gel length	1	700-0899
End gates, for gel pouring	1 PAIR	700-0900
Replacement gaskets for end gates	1 PAIR	700-0901
UV transparent gel tray with end gates	1	700-0907

*Based on an agarose gel of approximately 5 mm thickness.



PERFECTBLUE GEL SYSTEM, MAXI L

The Maxi L system can be used to run up to 600 samples, making it perfectly suited for large scale sample screening where up to 12 microtitre combs can be used on the same 23×40 cm gel tray.

Designed for economy and efficiency, the Maxi L system offers the use of economical partition walls, used to generate smaller gels, and for loading the samples, the microtitre combs allow rapid and error-free loading with multichannel pipettes. Gels can be poured directly into the tray through the use of 'end gates' (no need for taping) and the three-point levelling tray ensures a uniform thickness of gel to reduce 'smiling' effects which are common in gels of this size.

Supplied with 4 combs (1,5 mm thickness, 2× 25 and 2× 50 teeth), lid, gel tray, 3-point levelling platform, end gate, tank and cables.

Model	Maxi L
Gel size W×L (mm)	230×400
Sample capacity	25 – 600
Gel volume (ml)	460*
Buffer volume (ml)	~4500
Run time (min)	≥60
Unit W×L×H (mm)	320×530×100

Description	Pk	Cat. No.
PerfectBlue gel system Maxi L	1	700-0913

Description	Pk	Cat. No.
Combs for PerfectBlue wide format gel system Midi ExW		
Microtitre comb, 1,0 mm, 25 teeth, 27 µl*	1	700-0838
Microtitre comb, 1,5 mm, 25 teeth, 40 µl*	1	700-0839
Microtitre comb, 1,0 mm, 26 teeth, 27 µl*	1	700-0831
Microtitre comb, 1,5 mm, 26 teeth, 40 µl*	1	700-0832
Microtitre comb, 1,0 mm, 50 teeth, 11 µl*	1	700-0836
Microtitre comb, 1,5 mm, 50 teeth, 16 µl*	1	700-0837
Accessories		
Casting dam, aluminium, for shorter gel length	1	700-0833
Gel tray with end gates	1	700-0916
Replacement gaskets for end gates	1 PAIR	700-0915

*Based on an agarose gel of approximately 5 mm thickness



PERFECTBLUE WIDE FORMAT GEL SYSTEM, MAXI EXW

This ‘extra wide’ Maxi tank was developed especially for large sample numbers and rapid separation times. Accommodating up to 10 microtitre combs, the Maxi ExW can be used to separate up to 500 samples and facilitates error-free loading with multichannel pipettes. By optimising the position of the embedded platinum electrode and the use of the three-point levelling platform, with in-built bubble level, the Maxi ExW provides highly reproducible and dependable sample separation, free from ‘smiling’ effects.

The tray has 10 comb positions accomodating two different comb thicknesses. The tray is designed for use with sturdy ‘end gates’ for in-tray gel pouring and economical ‘tray partitions’ that enable smaller gels to be poured in the same tray – saving time and money.

Supplied with 4 combs (1,5 mm thickness, 2× 25 and 2× 50 teeth), lid, gel tray, 3-point levelling platform, end gates, tank and cables.

Model	Maxi ExW	
Gel size W×L (mm)	230×250	
Sample capacity	25 – 500	
Gel volume (ml)	290*	
Buffer volume (ml)	~3000	
Run time (min)	≥60	
Unit W×L×H (mm)	300×370×110	

Description	Pk	Cat. No.
PerfectBlue gel system Maxi ExW	1	700-0910

Description	Pk	Cat. No.
Combs for PerfectBlue wide format gel system Midi ExW		
Microtitre comb, 1,0 mm, 25 teeth, 27 µl*	1	700-0838
Microtitre comb, 1,5 mm, 25 teeth, 40 µl*	1	700-0839
Microtitre comb, 1,0 mm, 26 teeth, 27 µl*	1	700-0831
Microtitre comb, 1,5 mm, 26 teeth, 40 µl*	1	700-0832
Microtitre comb, 1,0 mm, 50 teeth, 11 µl*	1	700-0836
Microtitre comb, 1,5 mm, 50 teeth, 16 µl*	1	700-0837
Accessories		
Casting dam, aluminium, for shorter gel length	1	700-0833
Gel tray with end gates	1	700-0911
Replacement gaskets for end gates	1 PAIR	700-0915

*Based on an agarose gel of approximately 5 mm thickness



PERFECTBLUE WIDE FORMAT GEL SYSTEM, MAXI EXW ‘REVOLUTION’

The Maxi ExW ‘Revolution’ offers built-in buffer recirculation – without the need for pumps or additional tubing. The Maxi ExW ‘Revolution’ offers the same high throughput, rapid separation as the Maxi ExW model but, with the position of the cathode and a rising tube, the system uses hydrogen bubbles to slowly mix the buffer. This system thereby avoids the build-up of pH or ionic gradients for electrophoresis of maximum quality and stability.

The Maxi ExW ‘Revolution’ system offers 10 microtitre comb positions with a maximum capacity for 500 samples. The optional wall combs or casting dams enable the gel size to be reduced to pour smaller gels.

Supplied with 4 combs (1,5 mm thickness, 2×25 and 2×50 teeth), lid, gel tray, 3-point levelling platform, end gates, tank and cables.

Model	Maxi ExW ‘Revolution’	
Gel size W×L (mm)	230×250	
Sample capacity	25 – 500	
Gel volume (ml)	290*	
Buffer volume (ml)	~2800	
Run time (min)	≥60	
Unit W×L×H (mm)	300×380×155	

Description	Pk	Cat. No.
PerfectBlue gel system Maxi ExW ‘Revolution’	1	700-0912

Description	Pk	Cat. No.
Combs for PerfectBlue wide format gel system Midi ExW		
Microtitre comb, 1,0 mm, 25 teeth, 27 µl*	1	700-0838
Microtitre comb, 1,5 mm, 25 teeth, 40 µl*	1	700-0839
Microtitre comb, 1,0 mm, 26 teeth, 27 µl*	1	700-0831
Microtitre comb, 1,5 mm, 26 teeth, 40 µl*	1	700-0832
Microtitre comb, 1,0 mm, 50 teeth, 11 µl*	1	700-0836
Microtitre comb, 1,5 mm, 50 teeth, 16 µl*	1	700-0837
Accessories		
Casting dam, aluminium, for shorter gel length	1	700-0833
Gel tray with end gates	1	700-0911
Replacement gaskets for end gates	1 PAIR	700-0915

*Based on an agarose gel of approximately 5 mm thickness



HORIZONTAL ELECTROPHORESIS SYSTEMS, SHIROGEL

Designed for ease of use and safe operation, the shiroGEL horizontal electrophoresis systems and accessories are built to withstand the rigours of everyday use. For leakproof performance the gel boxes and gel trays are moulded from thick acrylic. UV transparent gel trays aid in visualisation of samples. Cassettes protect the electrodes and allow for easy replacement. Gel casting is simple with the durable rubber casting gates. Slots in the sides of the trays allow for easy comb placement. The two-piece design of the combs allows for vertical adjustment, giving the user control over the depth of the well. The combs supplied with the systems are 1,5 mm thick. Multiple combs, including those compatible with multichannel pipettes and different thicknesses, are also available. The 'EasyLift' gel box lid is easily removed using the side tabs and pressure pads. The lid is domed, to prevent condensation from dripping onto the gel, and is surrounded by a drip ring, to help recover the condensate and maintain buffer concentration.

- Moulded, durable construction
- Rubber gates for tapeless gel casting
- 'EasyLift' safety lid with buffer recapture system to maintain buffer concentration

Complete system, including UV transparent gel tray, is supplied with tank, lid, electrodes and 1,5 mm combs.

Model	Mini 10	Midi Plus 10	Midi Plus 15
Gel size W×L (mm)	70×100	150×100	150×150
Sample capacity	64	140	210
Buffer volume (ml)	225	300	500
Unit W×L×H (mm)	90×210×90	175×265×90	

Description	Pk	Cat. No.
Horizontal gel unit, shiroGEL Mini 10, 7×10 cm	1	700-0250
Horizontal gel unit, shiroGEL Midi Plus 10, 15×10 cm	1	700-0253
Horizontal gel unit, shiroGEL Midi Plus 15, 15×15 cm	1	700-0255

Description	Pk	Cat. No.
Combs for shiroGEL horizontal gel systems		
Comb, 5-well, 1,5 mm thickness for 7 cm gel tray	1	700-0263
Comb, 8-well, 1,0 mm thickness for 7 cm gel tray	1	700-0264
Comb, 8-well, 1,5 mm thickness for 15 cm gel tray	1	700-0289
Comb, 10-well, 1,0 mm thickness for 15 cm gel tray	1	700-0265
Comb, 10-well, 1,5 mm thickness for 7 cm gel tray	1	700-0258
Comb, 10-well, 1,5 mm thickness for 15 cm gel tray	1	700-0266
Comb, 12-well, 1,0 mm thickness for 7 cm gel tray*	1	700-0259
Comb, 12-well, 1,5 mm thickness for 7 cm gel tray*	1	700-0260
Comb, 12-well, 1,5 mm thickness for 15 cm gel tray	1	700-0268
Comb, 14-well, 1,5 mm thickness for 15 cm gel tray*	1	700-0270
Comb, 14-well, 2,0 mm thickness for 15 cm gel tray*	1	700-0271
Comb, 16-well, 1,0 mm thickness for 7 cm gel tray	1	700-0261
Comb, 16-well, 1,0 mm thickness for 15 cm gel tray	1	700-0272
Comb, 16-well, 1,0 mm thickness for 15 cm gel tray*	1	700-0273
Comb, 16-well, 1,5 mm thickness for 7 cm gel tray	1	700-0262
Comb, 16-well, 1,5 mm thickness for 15 cm gel tray*	1	700-0274
Comb, 16-well, 2,0 mm thickness for 15 cm gel tray*	1	700-0275
Comb, 18-well, 1,0 mm thickness for 15 cm gel tray*	1	700-0276
Comb, 18-well, 1,5 mm thickness for 15 cm gel tray*	1	700-0277
Comb, 20-well, 0,75 mm thickness for 15 cm gel tray	1	700-0278
Comb, 20-well, 1,0 mm thickness for 15 cm gel tray	1	700-0279
Comb, 20-well, 1,5 mm thickness for 15 cm gel tray	1	700-0280
Comb, 20-well, 2,0 mm thickness for 15 cm gel tray	1	700-0281
Comb, 28-well, 0,75 mm thickness for 15 cm gel tray*	1	700-0282
Comb, 28-well, 1,0 mm thickness for 15 cm gel tray*	1	700-0283
Comb, 28-well, 1,5 mm thickness for 15 cm gel tray*	1	700-0284
Comb, 30-well, 1,0 mm thickness for 15 cm gel tray*	1	700-0285
Comb, 30-well, 1,5 mm thickness for 15 cm gel tray*	1	700-0286
Comb, 35-well, 1,5 mm thickness for 15 cm gel tray	1	700-0287
Accessories		
Casting dam for 7 cm gel tray	2	700-0252
Casting dam for 15 cm gel tray	2	700-0257
UV transparent gel tray for shiroGEL Mini 10	1	700-0251
UV transparent gel tray for shiroGEL Midi Plus 10	1	700-0254
UV transparent gel tray for shiroGEL Midi Plus 15	1	700-0256

*Multichannel pipette compatible



HORIZONTAL ELECTROPHORESIS APPARATUS, SHIROGEL HORIZONTAL 96

This 96-well format horizontal gel electrophoresis unit is compatible with 8-channel multichannel pipettes, and matches up with a standard 96-well plate configuration.

- Average run time is 15 to 30 minutes per gel
- Layout of wells allows a run length of 18 mm per sample, providing ideal separation

Model	shiroGEL horizontal 96 (1 mm, 1 marker)
Gel size W×L (mm)	100×120
Sample capacity	96 samples plus 1 marker lane
Buffer volume (ml)	300
Unit W×L×H (mm)	220×125×90

Description	Pk	Cat. No.
shiroGEL horizontal 96 system, including comb block (12×8-sample, assembled, comb thickness 1,0 mm, 1 marker lane)	1	730-0340

Description	Pk	Cat. No.
Combs for shiroGEL horizontal 96		
Comb, 8-sample (multichannel pipette compatible), 1,0 mm thick, 1 marker lane	1	730-0344
Accessories		
96-well gel tray, 100×120 mm	1	730-0352



MINI GEL II ELECTROPHORESIS SYSTEM

The Mini Gel II is a complete electrophoresis system, which includes all components necessary to cast and run horizontal gels - gel trays, combs, casting stand, gel tank and digital power supply.

- Migration tank and gel trays are moulded for leakproof performance and long service life, and the gel box lid is vented to dissipate heat during electrophoresis
- Power supply easily disconnects from the gel box so that the gel box can be cleaned
- Mode and arrow keys on the membrane key pad make programming easy, with all parameters shown on a large digital display
- Casting sets are designed for pouring gels without the use of tape or spacers, and casting trays feature multiple slots for holding combs in place
- Electrodes are contained in cassettes to protect from damage

Supplied with gel tank, direct connection power supply, and standard gel casting set. Standard casting set includes 12,5×13 cm gel tray, 2 each 12,5×6 cm gel trays, 4 each 14/28 tooth combs (1 mm) and a casting stand. Optional Micro casting set includes 4 each 6×6 cm UV transparent gel trays, 2 each 5/8 tooth combs (1 mm) and a casting stand.

Sample capacity	112 samples (4 combs)
Capacity	1 large gel (12,5×13 cm), 2 small gels (12,5×6 cm) or 4 micro gels (6×6 cm)
Buffer tank volume (ml)	250
Max. power (W)	45
Input voltage (V)	Universal, AC 100 - 240 V, 50/60 Hz
Output current range/increments (mA)	10 - 400
Output voltage (V)	10 - 150
Memory	Last parameters saved in memory
Safety	Microsensor (Hall effect) in power supply, no output without safety lid in place, automatic crossover, no load and load change detection
Timer	Max. 99 h, 59 min or continuous, audible alert at end of run
Tank W×D×H (mm)	183×164×560
Unit W×L×H (mm)	245×170×620

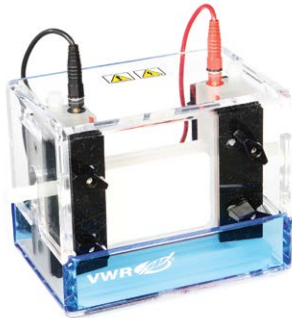
Description	Pk	Cat. No.
Mini Gel II complete electrophoresis system, EU plug	1	700-0003
Mini Gel II complete electrophoresis system, UK plug	1	700-0004
Mini Gel II complete electrophoresis system, CH plug	1	700-0005

Description	Pk	Cat. No.
Accessories		
Large UV transparent gel trays, 12,5×13 cm	2	700-0006
Small UV transparent gel trays, 12,5×6 cm	2	700-0007
Micro UV transparent gel trays, 6×6 cm	4	700-0008
Micro casting set	1	700-0011
Casting stand	1	700-0012
Standard casting set	1	700-0013
Combs		
Gel comb, 5/8 teeth (1 mm), reversible	2	700-0010
Gel comb, 14/28 teeth (1 mm), reversible	2	700-0009

Overview PerfectBlue vertical electrophoresis systems

System	Gel size (W x L)	Maximal number of samples	Buffer volume	Combs*	Cat. No. with or without casting base
PerfectBlue Twin S	10 x 10 cm	24	250 ml	10 (2x)	700-0931 700-0937 700-0955
PerfectBlue Twin M	16 x 14 cm	48	650 ml	10, 15 (2 each)	700-0961 700-1080
PerfectBlue Twin L	20 x 20 cm	50	1250 ml	15, 20 (2 each)	700-1205 700-0980
PerfectBlue Twin ExW S	20 x 10 cm	72	650 ml	15, 20 (2 each)	700-0986

* number of teeth, combs included in delivery



PERFECTBLUE DUAL GEL SYSTEM, TWIN S

The PerfectBlue Twin S system is designed for rapid separation of typical 10×10 cm mini gels. Due to its small size and a separation capacity of 6 to 30 samples, it is ideal for fast, analytical separations. A highly efficient cooling system ensures uncompromising results.

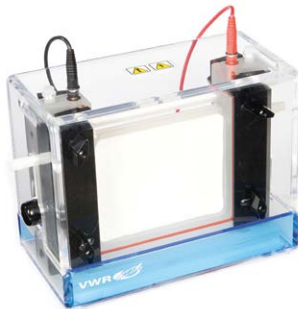
*Based on an average gel and a tooth with 14 mm depth.

Complete system, with or without casting base, includes internal cooling core, SuperSafe cover with attached leads, 4× glass plate pair sets, 2× combs (0,8 mm thick, 10 teeth), 2× spacer sets (0,8 mm), 2× replacement gaskets, 1× blocking plate (for single gel runs) and 1× SpacerPlate.

Model	Twin S
Buffer volume, gel tank (ml)	~250
Gel size W×H (mm)	100×100
Sample capacity	6 – 24
Unit W×H×D (mm)	170×130×140

Description	Pk	Cat. No.
PerfectBlue dual gel system Twin S for gels 10×10 cm, without casting base	1	700-0937
PerfectBlue dual gel system Twin S for gels 10×10 cm, with casting base	1	700-0931

Description	Pk	Cat. No.
Combs for PerfectBlue Twin S vertical gel systems		
Standard comb, 0,8 mm, 6 teeth, 120 µl*	1	700-0926
Standard comb, 1,5 mm, 6 teeth, 230 µl*	1	700-0927
Standard comb, 0,8 mm, 8 teeth, 85 µl*	1	700-0928
Standard comb, 1,5 mm, 8 teeth, 160 µl*	1	700-0929
Standard comb, 0,8 mm, 10 teeth, 60 µl*	1	700-0917
Standard comb, 1,5 mm, 10 teeth, 120 µl*	1	700-0918
Standard comb, 0,8 mm, 12 teeth, 45 µl*	1	700-0922
Standard comb, 1,5 mm, 12 teeth, 90 µl*	1	700-0923
Standard comb, 0,8 mm, 15 teeth, 35 µl*	1	700-0924
Standard comb, 1,5 mm, 15 teeth, 70 µl*	1	700-0925
Preparative comb, 0,8 mm, 2 teeth, 800/60 µl*	1	700-0938
Preparative comb, 1,5 mm, 2 teeth, 1500/100 µl*	1	700-0939
Accessories		
Spacer set (2 side and 1 bottom spacers), 0,8 mm	1 SET	700-0940
Spacer set (2 side and 1 bottom spacers), 1,5 mm	1 SET	700-0941
Glass plate, plain, clear, 100×100×2,4 mm	1	700-0919
Glass plate, notched, 100×100×1 mm	1	700-0920
Ceramic plate, notched, white, 100×100×2,4 mm	1	700-0921
Spare silicone rubber seals for base unit S	1 PAIR	700-0933
Cast-It S (for Twin S), casting system for up to 2 vertical gels 10×10 cm	1	700-0935
Gel casting base for Twin S	1	700-0932



PERFECTBLUE DUAL GEL SYSTEM, TWIN M

For 16×14 cm gels, the Twin M is a versatile system for SDS PAGE applications, in addition to non denaturing electrophoresis of proteins, SSCPs and dinucleotide repeats. With the enlarged upper buffer chamber, water circulation system and heat-sinking aluminium ceramic plates, the Twin M provides high speed separation while maintaining straight, sharp bands.

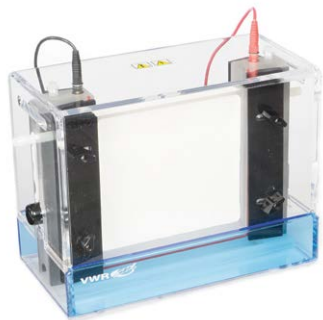
*Based on an average gel and a tooth at 20 mm depth

Complete system, with or without casting base, includes internal cooling core, SuperSafe cover with attached leads, 4× glass plate pair sets, 4× combs (1,5 mm thick, 2×10 teeth and 2×15 teeth), 4× spacer sets (1,5 mm), 2× replacement gaskets, 1× blocking plate (for single gel runs) and 1× SpacerPlate.

Model	Twin M
Buffer volume, gel tank (ml)	~650
Gel size W×H (mm)	160×140
Sample capacity	10 – 48
Unit W×H×D (mm)	250×140×200

Description	Pk	Cat. No.
PerfectBlue dual gel system Twin M for gels 16×14 cm, without casting base	1	700-0961
PerfectBlue dual gel system Twin M for gels 16×14 cm, with casting base	1	700-0955

Description	Pk	Cat. No.
Combs for PerfectBlue Twin M vertical gel systems		
Preparative comb, 0,8 mm, 2 teeth, 2095/80 µl*	1	700-0962
Preparative comb, 1,5 mm, 2 teeth, 3900/155 µl*	1	700-0963
Standard comb, 0,8 mm, 10 teeth, 165 µl*	1	700-0945
Standard comb, 0,8 mm, 15 teeth, 95 µl*	1	700-0949
Standard comb, 0,8 mm, 20 teeth, 60 µl*	1	700-0951
Standard comb, 0,8 mm, 24 teeth, 45 µl*	1	700-0953
Standard comb, 1,5 mm, 10 teeth, 310 µl*	1	700-0946
Standard comb, 1,5 mm, 15 teeth, 180 µl*	1	700-0950
Standard comb, 1,5 mm, 20 teeth, 115 µl*	1	700-0952
Standard comb, 1,5 mm, 24 teeth, 85 µl*	1	700-0954
Accessories		
Spacer set (2 side and 1 bottom spacers), 0,8 mm	1 SET	700-0964
Spacer set (2 side and 1 bottom spacers), 1,5 mm	1 SET	700-0965
Glass plate, plain, clear, 160×140×3,2 mm	1	700-0947
Glass plate, notched, clear, 160×140×3,2 mm	1	700-0948
Casting base complete with gaskets and levers	1	700-0956
Cast-It M (for Twin M), casting system for up to 2 vertical gels 16×14 cm	1	700-0959
Spare silicone rubber seals for base unit M	1 PAIR	700-0957



PERFECTBLUE DUAL GEL SYSTEM, TWIN L

The largest of the series, the Twin L can accommodate 20×20 cm gels for the simultaneous separation of up to 50 samples making this system ideally suited to either higher throughput or separating lower molecular weight samples. The system actively manages temperature build up with an efficient water cooling system and central aluminium ceramic plates for effective and safe long-term operation.

Complete system, with or without casting base, includes internal cooling core, SuperSafe cover with attached leads, 4× glass plate pair sets, 4× combs (1,5 mm thick, 2×15 teeth and 2×20 teeth), 4× spacer sets (1,5 mm), 2× replacement gaskets, 1× blocking plate (for single gel runs) and 1× SpacerPlate.

Model	Twin L
Buffer volume, gel tank (ml)	~1250
Gel size W×H (mm)	200×200
Sample capacity	10 – 50
Unit W×H×D (mm)	300×170×240

Description	Pk	Cat. No.
PerfectBlue dual gel system Twin L for gels 20×20 cm, without casting base	1	700-1205
PerfectBlue dual gel system Twin L for gels 20×20 cm, with casting base	1	700-1080

Description	Pk	Cat. No.
Combs for PerfectBlue Twin L vertical gel systems		
Standard comb, 0,8 mm, 10 teeth, 215 µl*	1	700-0998
Standard comb, 1,5 mm, 10 teeth, 405 µl*	1	700-0999
Standard comb, 0,8 mm, 15 teeth, 130 µl*	1	700-1013
Standard comb, 1,5 mm, 15 teeth, 245 µl*	1	700-1014
Standard comb, 0,8 mm, 20 teeth, 85 µl*	1	700-1015
Standard comb, 1,5 mm, 20 teeth, 165 µl*	1	700-1017
Standard comb, 0,8 mm, 25 teeth, 60 µl*	1	700-1043
Standard comb, 1,5 mm, 25 teeth, 115 µl*	1	700-1046
Preparative comb, 0,8 mm, 2 teeth, 2620/80 µl*	1	700-1209
Preparative comb, 1,5 mm, 2 teeth, 4915/155 µl*	1	700-1210
Accessories		
Spacer set (2 side and 1 bottom spacer), 0,8 mm	1 SET	700-1211
Spacer set (2 side and 1 bottom spacer), 1,5 mm	1 SET	700-1214
Glass plate, plain, clear, 200×200×3,2 mm	1	700-1020
Glass plate, notched, clear, 200×200×3,2 mm	1	700-1034
Casting base complete with gaskets and levers	1	700-1087
Replacement silicone rubber seals for base unit L	1 PAIR	700-1089
Cast-It L (for Twin L), casting system for up to 2 vertical gels 20×20 cm	1	700-1093

*Based on an average gel and a tooth at 20 mm depth



PERFECTBLUE DUAL GEL SYSTEM, TWIN EXW S

Extra wide, for gels 20×10 cm, Twin ExW S is ideally suited to rapid analytical separations or large sample separation. The combination of the triple-cathode construction, and effective cooling provides a stable environment for high quality sample separation.

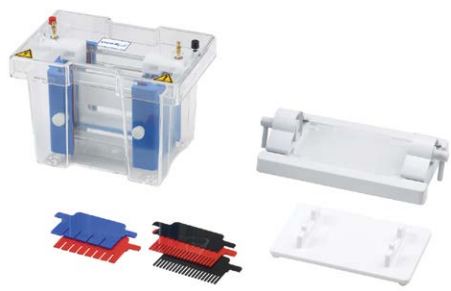
Complete system, with or without casting base, includes internal cooling core, SuperSafe cover with attached leads, 4× glass plate pair sets, 4× combs (0,8 mm thick, 2×15 teeth and 2×20 teeth), 4× spacer sets (0,8 mm), 2× replacement gaskets, 1× blocking plate (for single gel runs) and 1× SpacerPlate.

Model	Twin ExW S
Buffer volume, gel tank (ml)	~650
Gel size W×H (mm)	200×100
Sample capacity	10 – 72
Unit W×H×D (mm)	300×130×140

Description	Pk	Cat. No.
PerfectBlue dual gel system Twin ExW S for gels 20×10 cm, without casting base	1	700-0986
PerfectBlue dual gel system Twin ExW S for gels 20×10 cm, with casting base	1	700-0980

Description	Pk	Cat. No.
Combs for PerfectBlue Twin ExW S vertical gel systems		
Standard comb, 0,8 mm, 10 teeth, 150 µl*	1	700-0968
Standard comb, 1,5 mm, 10 teeth, 285 µl*	1	700-0969
Standard comb, 0,8 mm, 15 teeth, 90 µl*	1	700-0973
Standard comb, 1,5 mm, 15 teeth, 170 µl*	1	700-0974
Standard comb, 0,8 mm, 20 teeth, 60 µl*	1	700-0975
Standard comb, 1,5 mm, 20 teeth, 115 µl*	1	700-0976
Standard comb, 0,8 mm, 25 teeth, 40 µl*	1	700-0977
Standard comb, 1,5 mm, 25 teeth, 80 µl*	1	700-0978
Microtitre comb, 0,8 mm, 18 teeth, 70 µl*	1	700-0990
Microtitre comb, 1,5 mm, 18 teeth, 135 µl*	1	700-0991
Microtitre comb, 0,8 mm, 36 teeth, 30 µl*	1	700-0988
Microtitre comb, 1,5 mm, 36 teeth, 55 µl*	1	700-0989
Preparative comb, 0,8 mm, 2 teeth, 1905/60 µl*	1	700-0992
Preparative comb, 1,5 mm, 2 teeth, 3575/110 µl*	1	700-0993
Accessories		
Spacer set (2 side and 1 bottom spacers), 0,8 mm	1 SET	700-0994
Spacer set (2 side and 1 bottom spacers), 1,5 mm	1 SET	700-0995
Glass plate, plain, clear, 200×100×3 mm	1	700-0970
Glass plate, notched, clear, 200×100×3 mm	1	700-0971
Casting base complete with gaskets and levers	1	700-0981
Replacement silicone rubber seals for base unit ExW S	1 PAIR	700-0982
Cast-It ExW S (for Twin ExW S), casting system for up to 2 vertical gels 20×10 cm	1	700-0984

*Based on an average gel and a tooth with 14 mm depth.



MODULAR MINI VERTICAL PAGE SYSTEMS, SHIROGEL

The shiroGEL mini vertical PAGE system is modular, allowing PAGE and electroblotting to be carried out in the same tank, simply by changing the inserts. The system features inserts for each application, and a common buffer tank in which to run them. Each insert has its own electrode assembly, which connects to the lid of the buffer tank. For safety, the power leads connect directly to the lid. When the lid is removed, power is disconnected from the system. The inserts also have a small pad that fits into position in the lid. This ensures that the lid is always properly placed and aids in its removal. The buffer tank is moulded to prevent separation and leaking. A variety of spacers, combs and other accessories are available to customise the system. All spacers and combs are colour coded or clearly labelled to indicate thickness.

- Runs up to four gels simultaneously
- Gels can be cast and run using the PAGE module
- Sturdy, moulded buffer chamber with lid that fits only one way

Complete system includes buffer tank; PAGE module; casting base; 10×10 cm notched glass plates (2); 10×10 cm glass plates with bonded spacers (2); and 2×12-tooth, 1 mm thick combs.

Buffer volume, gel tank (ml)	250
Gel size W×H (mm)	100×100
Sample capacity	20 samples per gel, 2 gels per run
Unit W×H×D (mm)	190×130×150**

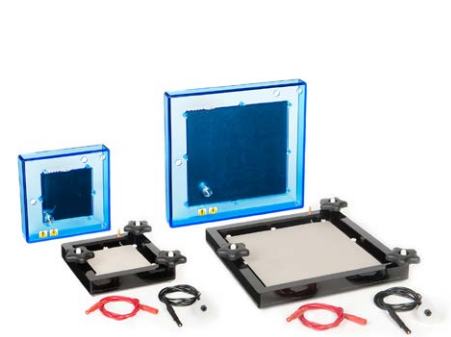
Description	Pk	Cat. No.
Mini PAGE complete system, shiroGEL	1	700-0292

Description	Pk	Cat. No.
Combs for mini vertical PAGE system, shiroGEL		
Comb, 5-well, 0,75 mm thickness	1	700-0311
Comb, 5-well, 1,0 mm thickness	1	700-0312
Comb, 5-well, 1,5 mm thickness	1	700-0313
Comb, 8-well, 1,0 mm thickness*	1	700-0314
Comb, 10-well, 0,75 mm thickness	1	700-0298
Comb, 10-well, 1,0 mm thickness	1	700-0299
Comb, 10-well, 1,5 mm thickness	1	700-0300
Comb, 12-well, 0,75 mm thickness	1	700-0301
Comb, 12-well, 1,0 mm thickness	1	700-0302
Comb, 12-well, 1,5 mm thickness	1	700-0303
Comb, 12-well, 2,0 mm thickness	1	700-0304
Comb, 16-well, 1,0 mm thickness*	1	700-0305
Comb, 20-well, 0,75 mm thickness	1	700-0307
Comb, 20-well, 1,0 mm thickness	1	700-0308
Comb, 20-well, 1,5 mm thickness	1	700-0309
Accessories		
Casting stand for PAGE insert	1	700-0294
PAGE insert only (no accessories)	1	700-0295
Spacers, 0,75 mm thick	2	700-0296
Spacers, 1,0 mm thick	2	700-0306
Spacers, 1,5 mm thick	2	700-0297
Spacers, 2,0 mm thick	2	700-0310
Dummy plate, 10×10 cm	1	700-0318
Notched glass plates with 0,75 mm spacers, pack of 2	1	700-0319
Notched glass plates with 1,0 mm spacers, pack of 2	1 PAIR	700-0321
Notched glass plates with 1,5 mm spacers, pack of 2	1	700-0320
Notched glass plates, 2 mm thick	2	700-0322
Notched glass plates with 2 mm spacers, pack of 2	1	700-0323
Plain glass plates with 0,75 mm spacers, pack of 2	1	700-0324
Plain glass plates with 1,0 mm spacers	2	700-0326
Plain glass plates with 1,5 mm spacers, pack of 2	1	700-0325
Plain glass plates, 2 mm thick	2	700-0327
Plain glass plates with 2 mm spacers	2	700-0328

*Multichannel pipette compatible; **buffer tank

Overview PerfectBlue electroblotting systems

System	Maximal transfer area	Buffer volume	Transfer time	Cat. No.
PerfectBlue semi-dry S	10 x 10 cm	50 ml	30 – 120 min	700-1219
PerfectBlue semi-dry M	20 x 20 cm	200 ml	30 – 120 min	700-1220
PerfectBlue tank blotter S	8.5 x 9.5 cm	1300 ml	120 – 360 min	700-1228
PerfectBlue tank blotter M	18 x 20 cm	3000 ml	120 – 360 min	700-1230



PerfectBlue™ electroblotter Sedec™ S and M



SEMI-DRY ELECTROBLOTTERS, PERFECTBLUE

PerfectBlue semi-dry electroblotters are designed for clean, rapid and effective transfer of proteins and nucleic acids from polyacrylamide or agarose gels to membranes. Suitable for use with Western, Southern and Northern blotting, these semi-dry blotters reduce many lengthy procedures down to around an hour.

Blotting chamber

- Highly durable Plexiglass® construction
- Totally removable cover which attaches flat to reduce overall unit storage size
- Oversized, easy to handle screws for fumble-free and safe cover adjustment
- High quality gold plated plug contacts for optimal electrical contact.

Electrodes

- Solid electrode plates for an even transfer over the entire gel surface
- High grade stainless steel cathode and platinum coated titanium anode for maximum transfer efficiencies
- Sturdy cover for enhanced user safety
- Design of lid prevents accidental wrong orientation of electrical field.

Model	PerfectBlue S (10x10 cm)	PerfectBlue M (20x20 cm)
Active transfer area (cm²)	100	400
Buffer volume (ml)	~50	~200
Transfer time	30 - 120 min	
Unit WxDxH (mm)	185x185x60	295x295x60

Description	Pk	Cat. No.
Semi-dry electroblotter PerfectBlue S	1	700-1219
Semi-dry electroblotter PerfectBlue M	1	700-1220

SEMI-DRY BLOTTER, KUROGEL

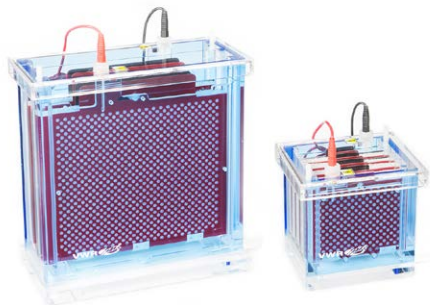
The kuroGEL semi-dry blotter provides great flexibility in a laboratory since it can be used for all types of blotting: Western, Southern and Northern. Blotting is fast and easy, and can typically be completed in 15 to 30 minutes. Set-up procedures are easy and economical with little buffer needed. The screw down lid adjusts to varying gel thicknesses and sizes, while the platinum coated electrodes provide uniform pressure ensuring even transfers.

- Suitable for Western, Southern and Northern blots
- Rapid transfer times
- Uniform heat dispersion
- Variable gel thickness
- Minimal buffer volume

Each unit includes base with plate electrode, lid with plate electrode, electrical leads, and 2x unit screws.

Model	kuroGEL semi-dry blotter
Buffer volume (ml)	20
Capacity	4 blots: 80x85 mm 2 blots: 160x85 mm 1 blot: 150x175 mm
Unit WxDxH (mm)	325x250x55

Description	Pk	Cat. No.
Semi-dry blotter, kuroGEL	1	700-0416



PerfectBlue™ electroblotter Web™ S and M

TANK BLOTTERS, PERFECTBLUE

The PerfectBlue S and M tank electroblotters are designed to rapidly transfer nucleic acid or protein fragments from up to four polyacrylamide gels at a time to nitrocellulose, nylon or PVDF membranes. The colour coded cassettes allow for easy assembly of transfer sandwich and error-free transfer. The large buffer capacity and integral cooling permit extended transfer times and high voltage/high current operation for the transfer of high molecular weight proteins.

- Sturdy buffer chamber for up to four colour coded blotting cartridges, with sufficient volume for magnetic stirrer to ensure uniform temperature and pH conditions
- Highly durable, high grade steel and platinum coated titanium electrodes give uniform electrical field over the entire transfer surface; gold plated plugs and corrosion proof electrodes for long durability and reliable electrical contact
- Water circulation system for buffer cooling at the base of the tank with effective heat exchanger made of ceramic aluminium and increased exchange surface area to aid heat transfer
- Safety cover includes securely attached cables to enhance user safety

Model	PerfectBlue S	PerfectBlue M
Active transfer area (cm²)	80,75	360
Buffer volume (ml)	~1300	~4500
Transfer time	120 - 360 min	
Unit WxDxH (mm)	185x145x155	290x140x350

Description	Pk	Cat. No.
Electroblotter PerfectBlue S, for gels up to 85x95 mm	1	700-1228
Electroblotter PerfectBlue M, for gels up to 180x200 mm	1	700-1230



MINI PAGE ELECTROBLOTTING SYSTEM, SHIROGEL

The shiroGEL Mini PAGE electroblotting system allows quick and easy blotting of three gels simultaneously. Gels fit snugly in blotting cassettes with transfer membranes, which are then placed into the blotting insert. Coiled electrodes within the insert generate a high intensity current, allowing standard transfer to take place in approximately 1 hour.

- Blots up to three gels simultaneously
- Standard transfer in approximately one hour

Complete system includes buffer tank with power leads and cooling pack; blotting insert; 3 blotting cassettes; 6 fibre pads; 10x10 cm notched plates (2); 10x10 cm plates with spacers (2); and 2x12-tooth, 1 mm thick combs.

Buffer tank volume (ml)	1200
Capacity	3 gels/transfer

Description	Pk	Cat. No.
Mini PAGE electroblotting system, shiroGEL, without PAGE components	1	700-0291
Mini PAGE electroblotting system, shiroGEL, complete	1	700-0293

Description	Pk	Cat. No.
Accessories		
Blotting insert, including 3 cassettes	1	700-0290
Mini blotting cassette	1	700-0316
Fibre pads for blotting cassette	8	700-0315
Mini cooling pack	1	700-0317



PerfectBlue™ universal power supply



PerfectBlue™ HC power supply

POWER SUPPLY, UNIVERSAL, PERFECTBLUE

VWR PerfectBlue power supply is constructed with PC housing and flame-retardant ABS face plate, and is ideal for DNA, RNA and protein electrophoresis, as well as blotting, and for routine horizontal and vertical electrophoresis.

- Compact size with a stackable case provides a small footprint
- TFT-LCD (2,4») colour screen shows all parameters during operation
- Timer with alarm function
- Constant voltage/current/power operation mode
- Restart the operating program automatically after power outage

The power supply is microprocessor controlled and has four pairs of outlet terminals which covers the broadest range of applications in the general laboratory. The microprocessor control can perform either continuously or as a timed output, and the user can pause and resume anytime without resetting the timer.

It can operate in full programmable mode offering up to six multi-step setting conditions. The unit has pre-programmed typical running conditions for easy start-up. It is designed with features to ensure laboratory and experiment safety.

Additional features include leakage detection, over-temperature/voltage/current protection, sudden load change detection and shrouded plugs and sockets. Voltage or current with automatic crossover, and when target constant mode is set, system automatically adjusts the two other parameter to maximum to allow a constant run.

ELT certified.

Model	Universal	
Current (mA)	1 – 700	
Display	TFT	
Input voltage (V)	100 – 240 V, 47 – 60 Hz	
Operating conditions	4...40 °C	
Operating constant modes	Current, voltage, power	
Output current range/increments (mA)	1 – 700/1	
Output voltage range/increments (V)	5 – 300/1	
Power (W)	150	
Timer	1 – 999 min with alarm, continuous	
Weight (kg)	2,1	
WxDxH (mm)	215x335x104	

Description	Pk	Cat. No.
Power supply, universal, PerfectBlue	1	700-1285

POWER SUPPLY, HIGH CURRENT, PERFECTBLUE

VWR PerfectBlue power supply is constructed with flame-retardant ABC face plate and is ideal for DNA, RNA, and protein electrophoresis, as well as blotting and all routine horizontal and vertical electrophoresis.

- Compact size, with a stackable case, provides a small footprint
- TFT-LCD (2,4») colour screen shows all parameters during operation
- Timer with alarm function
- Constant voltage/current/power operation mode
- Restart the operating program automatically after power outage

The power supply is microprocessor controlled and has four pairs of outlet terminals which covers the broadest range of application in the general laboratory. The microprocessor control can perform either continuous or timed output, and the user can pause and resume anytime without resetting the timer.

The unit can operate in full programmable mode offering up to six multi-step setting conditions. It also offers pre-programmed typical running conditions for easy start-up. It is designed with features to ensure safety of the lab and experiment.

The high current power supply provides higher output current and power (W) compared to the universal model, to support higher performance in DNA electrophoresis, Western blotting and SDS-PAGE applications.

Additional features include leakage detection, over-temperature/voltage protection, sudden load change detection and shrouded plugs and sockets. Voltage or current with automatic crossover, and when target constant mode is set, system automatically adjusts the two other parameter to maximum to allow a constant run.

Model	High current	
Current (mA)	10 - 3000	
Display	TFT	
Input voltage (V)	100 - 240 V, 47 - 60 Hz	
Operating conditions	4...40 °C	
Operating constant modes	Current, voltage, power	
Output current range/increments (mA)	10 - 3000/10	
Output voltage range/increments (V)	5 - 300/1	
Power (W)	300	
Timer	1 - 999 min with alarm, continuous	
Weight (kg)	2,1	
WxDxH (mm)	215x335x104	

Description	Pk	Cat. No.
Power supply, high current, PerfectBlue	1	700-1316



Power supply, 300 V/2000 mA



Mini power supply

VWR® POWER SUPPLIES, BASIC 500 V AND HIGH CURRENT 300 V

For most electrophoresis applications, the Basic Power Supply is ideal. For high current blotting applications, choose the High Current Power Supply.

- Vertical orientation to save space
- Basic 500 V/400 mA, 120 W maximum output
- High current 300 V/2000 mA, 300 W maximum output

The colour touch screen control panel is easy to use, allowing setting of voltage, amperage and run time. Four sets of output jacks allow connection of multiple electrophoresis tanks.

Current (mA)	400	2000
Input	100 - 240 V	
Output	10 - 500 V	10 - 300 V
Power (W)	120	300

Description	Pk	Cat. No.
Power supply, 120 W, EU-plug	1	700-1330
Power supply, 120 W, UK-plug	1	700-1372
Power supply, 300 W, EU-plug	1	700-1373
Power supply, 300 W, UK-plug	1	700-1374

VWR® MINI POWER SUPPLY

VWR® mini power supply is a basic, economical unit perfect for small nucleic acid gel tanks.

- Compact and simple to operate
- Ideal for basic agarose nucleic acid applications
- Two pairs of output jacks

The user can select either 100 or 200 V output. All common horizontal gel tanks are compatible with the standard output jacks.

Input	100 - 240 V
Output	100/200 V
Power (W)	40

Description	Pk	Cat. No.
Mini power supply, EU-plug	1	700-0856
Mini power supply, UK-plug	1	700-0877



Solutions for discovery

VWR® Gel Documentation & Western blot Imaging

A wide range of instruments for gel or Western blot imaging and analysis based on fluorescence, chemiluminescence or colorimetric dyes.



For your copy visit vwr.com

PB19057-EN

GEL MATRICES & ACTIVATORS

AGAROSE, ELECTRAN, HIGH RESOLUTION, LOW MELTING FOR ELECTROPHORESIS

Agarose high resolution is optimised to give exceptional separation on agarose of nucleic acid fragments below 1000 base pairs, and differing by only a few base pairs. It retains the low gelling characteristics of the standard Agarose HR, and offers significantly increased gel strength at the expense of a higher melting temperature. This results in gels which are flexible and easy to handle. These properties make it the agarose of choice for analytical gel separations to check the quality and size of amplified fragments, and for use in restriction mapping involving small digestion fragments.

- Free from DNases and RNases

Description	Pack type	Pk	Cat. No.
Agarose, Electran, high resolution, low melting for electrophoresis	Plastic bottle	25 g	436552V
Agarose, Electran, high resolution, low melting for electrophoresis	Plastic bottle	100 g	436553W

AGAROSE, ELECTRAN, HIGH RESOLUTION FOR ELECTROPHORESIS

Agarose high resolution (HR) has melting, max. 90 °C, and gelling temperatures (32,5 to 38 °C), but differs from traditional low melting point molecular biology grade agaroses in the gel separation range. Using this agarose in electrophoresis allows fine and consistent resolution of nucleic acids below 1000 base pairs, which differ by only a few base pairs. The properties of Agarose HR allow consistent gel separations (analytical and preparative) and performance of *in-vitro* translation and transcription mapping, as well as *in-vivo* ligation and transformation. For analytical gel separation of DNA/RNA below 1000 base pairs, where a higher gel strength for ease of manipulation is required, we recommend the use of Agarose, high resolution, Electran (43655).

- Free from DNases and RNases

Description	Pack type	Pk	Cat. No.
Agarose, Electran, high resolution for electrophoresis	Plastic bottle	25 g	437122H
Agarose, Electran, high resolution for electrophoresis	Plastic bottle	125 g	437123Y

AGAROSE (100 BP - 23 KB), ELECTRAN, DNA GRADE FOR ELECTROPHORESIS

DNA grade agarose is suitable for the majority of routine DNA separations. For applications where a more stringent specification is required use agarose molecular biology grade.

- Free from DNases and RNases

Description	Pack type	Pk	Cat. No.
Agarose (100 bp - 23 kb), Electran, DNA grade for electrophoresis	Plastic bottle	100 g	438792U
Agarose (100 bp - 23 kb), Electran, DNA grade for electrophoresis	Plastic bottle	1 kg	438795A

AGAROSE, ELECTRAN, WIDE RANGE, LOW MELTING FOR ELECTROPHORESIS

Agarose, low gelling temperature has low melting and gelling temperatures, low sulphate content and high optical clarity. It is suitable for use in protein and nucleic acid electrophoresis and for immobilisation of heat-labile substances (e.g. bacteria, yeast and eukaryotic cells) due to the low gelling point. In addition, the low melting point of this agarose offers the possibility of recovering proteins and nucleic acids without denaturation when re-melted.

- Free from DNases and RNases

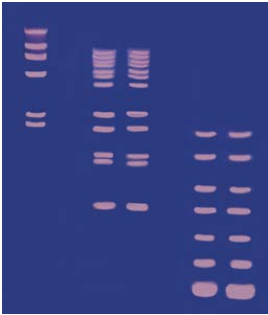
Description	Pack type	Pk	Cat. No.
Agarose, Electran, wide range, low melting for electrophoresis	Plastic bottle	25 g	444152G
Agarose, Electran, wide range, low melting for electrophoresis	Plastic bottle	125 g	444153H



AGAROSE, UNIVERSAL, PEQGOLD

High quality standard agarose for routine analysis with broad separation range (0,05 to 50 kbp). Ideal for blotting applications due to high gel strength. Free from RNases, DNases and enzyme inhibitors.

Description	Pk	Cat. No.
Universal agarose	100 g	732-2788
Universal agarose	500 g	732-2789



AGAROSE I™

Agarose I™ is a standard melting/gelling agarose, suitable for routine nucleic acid analytical/preparative applications (250 bp to 22 kb).

- All-purpose, high purity agarose
- Exceptional band resolution and clarity
- Nuclease- and protease-free

Agarose I™ has a low EEO (electroendosmosis) for shorter electrophoretic runs without compromising resolution. Agarose I™ is excellent for blotting techniques and general manipulations.

Description	Pk	Cat. No.
Agarose I™ tablets, 500 mg	100 Tab.	K857-100TABS

GEL MATRICES & ACTIVATORS

ACRYLAMIDE (MONOMER) 40% IN AQUEOUS SOLUTION, ELECTRAN FOR ELECTROPHORESIS

Ready to use solution for customised polyacrylamide gel electrophoresis of proteins and PAGE of nucleic acids.

Description	Pack type	Pk	Cat. No.
Acrylamide (monomer) 40% in aqueous solution, Electrnan for electrophoresis	Glass bottle SAFEBREAK	1 l	443545P

ACRYLAMIDE AND BIS-ACRYLAMIDE

An extensive line of acrylamide and bis-acrylamide pre-weighed powder blends, pre-mixed stock solutions and ready to use solutions for customised polyacrylamide gel electrophoresis of proteins and PAGE of nucleic acids.

Ultra-pure (>99,9%) acrylamide and bis-acrylamide powders provide the flexibility to prepare solutions having concentrations and ratios for all electrophoresis applications.

Liquid blends minimise the handling of neurotoxic acrylamide.

Packed in a plastic bottle.

Description	Pk	Cat. No.
Ultra-pure powders		
Bis-acrylamide	50 g	0172-50G
Bis-acrylamide	100 g	0172-100G
Bis-acrylamide	250 g	0172-250G
Solutions		
Acryl/Bis™ 29:1	500 ml	0311-500ML
Acryl/Bis™ 37,5:1	500 ml	0254-500ML

ACRYLAMIDE-BIS (29:1), 30% AQUEOUS SOLUTION, ULTRA-PURE GRADE

Description	Pk	Cat. No.
Acrylamide-Bis (29:1), 30% aqueous solution	500 ml	E344-500ML

ACRYLAMIDE (MONOMER) ≥99.9%, ELECTRAN FOR ELECTROPHORESIS

Description	Pack type	Pk	Cat. No.
Acrylamide (monomer) ≥99.9%, Electrnan for electrophoresis	Plastic bottle	1 kg	442994J

TEMED (N,N,N',N'-TETRAMETHYLETHYLENEDIAMINE) ≥99%, PROTEOMICS GRADE

Accelerator used in polyacrylamide gel polymerisation, usually equimolar to initiator – TEMED.

Description	Pack type	Pk	Cat. No.
TEMED (N,N,N',N'-Tetramethylethylenediamine) ≥99%, Proteomics Grade	Amber bottle	25 ml	M146-25ML
TEMED (N,N,N',N'-Tetramethylethylenediamine) ≥99%, Proteomics Grade	Amber bottle	100 ml	M146-100ML

APS (AMMONIUM PEROXODISULPHATE) ≥98%, PRO-PURE, PROTEOMICS GRADE

Tested to be nuclease-, DNase- and/or protease-free where applicable. Appropriate for use in proteomic research applications.

Description	Pack type	Pk	Cat. No.
APS (Ammonium peroxodisulphate) ≥98%, Pro-Pure, Proteomics Grade	HDPE bottle	25 g	M133-25G
APS (Ammonium peroxodisulphate) ≥98%, Pro-Pure, Proteomics Grade	HDPE bottle	100 g	M133-100G

APS (AMMONIUM PERSULPHATE) TABLETS FOR BIOTECHNOLOGY

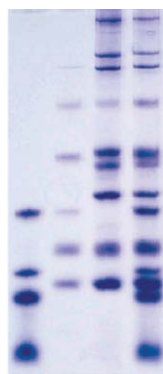
Ammonium persulphate forms free radicals when dissolved in water, which initiate polymerisation of acrylamide solutions.

- Convenient tablet, easily prepared without weighing
- Fast and easy polymerisation of acrylamide mixtures
- Odour-free and non flammable
- Non hazardous shipping

Due to the instability of APS in water, a working solution must be prepared daily for optimum performance. A 10% APS solution can be easily be prepared, without weighing, by adding one 150 mg APS tablet to 1,5 ml of water.

Packed in plastic bottle.

Description	Pk	Cat. No.
APS (ammonium persulphate) tablet	100 Tab.	K833-100TABS



Resolution of a wide range of proteins on a 10% NEXT GEL®. Low (K880, lane 1), Mid/Low (J450, lane 2), and Wide (K494, lane 3) Range Protein Molecular Weight Markers were loaded on a 10% NEXT GEL® individually and as a mixture of all three markers (lane 4). The gel was post-stained with Coomassie® Blue and destained using standard procedures. The NEXT GEL® shows resolution of proteins from 3.5 kDa to 212.0 kDa.

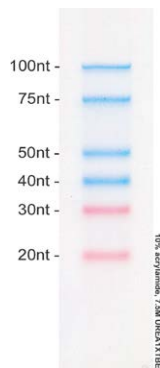
ACRYLAMIDE SOLUTIONS, NEXT GEL®

NEXT GEL® is a ready to pour pre-mixed solution of acrylamide, bis-acrylamide, gel buffer, and SDS that enables superior, ultra-fine resolution of protein bands. The unique acrylamide matrix slows the migration of proteins, eliminating the need for a stacking gel. This not only saves time, but also allows the proteins to run across a longer gel surface resulting in increased resolution. The proprietary chemistry has gradient-like properties, which enables the separation of small peptides and high molecular weight proteins in the same gel.

- Ready to pour SDS polyacrylamide solutions - just add APS and TEMED
- Faster gel casting with no stacking gel required
- Broad range of separation - 3,5 to 212 kDa on the same gel
- High resolution of protein bands

Supplied with 20X running buffer.

Description	Pk	Cat. No.
NEXT GEL® 7,5% acrylamide solution, MW separation range: 20 to 300 kDa	100 ml	M255-100ML
NEXT GEL® 7,5% acrylamide solution, MW separation range: 20 to 300 kDa	500 ml	M255-500ML
NEXT GEL® 10% acrylamide solution	500 ml	M256-500ML
NEXT GEL® 12,5% acrylamide solution, MW separation range: 3,5 to 100 kDa	500 ml	M257-500ML
NEXT GEL® 15% acrylamide solution	500 ml	M258-500ML



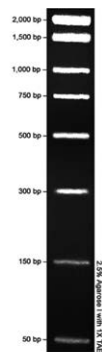
RNA LADDER, RIBOREADY™ COLOR MICRO

RiboReady™ Color Micro RNA ladder allows precise sizing of RNA molecules in denaturing acrylamide gels. The apparent sizes of bands in the RiboReady™ Color Micro RNA ladder are 100, 75, 50, 40, 30 and 20 bases in length.

- 6 bands ranging from 20 to 100 bases
- Contains pre-stained nucleic acids that are visible during electrophoresis

Ready to use mixture that does not require heating or addition of a denaturing agent before use.

Description	Pk	Cat. No.
RIBOREADY™ Color Micro RNA ladder	1 KIT	1B1491-25RXN



PCR LADDER, EZ-VISION®

EZ-Vision® PCR DNA ladder is a pre-stained molecular weight ladder in loading buffer that allows immediate visualisation of DNA ladder post-electrophoresis. This non toxic, non mutagenic dye eliminates the need for ethidium bromide staining. Eight fragments range from 50 to 2000 bp with reference bands for easy identification.

- 8 fragments ranging from 50 to 2000 bp
- 'Load and go' formula with instant visualisation
- Eliminates the use of ethidium bromide

Environmentally preferable attribute	Safer Human and Environmental Health	
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Description	Pk	Cat. No.
EZ-Vision® PCR DNA ladder, sufficient for 50 preps	500 µl	N853-500UL

DNA LADDERS

VWR DNA ladders are supplied in a loading buffer that is ready to use on agarose and polyacrylamide DNA gels. The ladders are suitable with TBE, TAE, SB and LB electrophoresis systems.

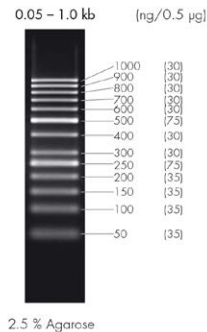
- Supplied in loading buffer, ready to use directly on the gel
- Mass-calibrated bands for DNA quantification
- PCR DNA ladder has a 1000 bp band that is extra bright to serve as reference point

High range DNA ladder molecular range: 200 to 12000 bp; mass-calibrated bands from 6 to 40 ng/band for DNA quantification.

Low range DNA ladder molecular range: 100 to 1000 bp; mass-calibrated bands from 8 to 40 ng/band for DNA quantification.

PCR DNA ladder molecular range: 100 to 3000 bp; mass-calibrated bands from 10 to 30 ng/band for DNA quantification.

Each DNA ladder is supplied in 0,5 ml packs sufficient for 250 lanes.



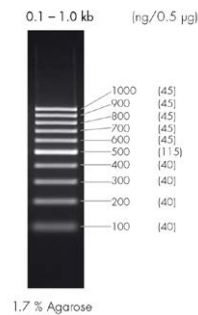
Description	Pk	Cat. No.
High range DNA ladder, 200 to 12000 bp, sufficient for 250 lanes (loading 2 µl per gel), 1x0,5 ml	1 KIT	733-2577
Low range DNA ladder, 100 to 1000 bp, sufficient for 250 lanes (loading 2 µl per gel), 1x0,5 ml	1 KIT	733-2578
PCR ladder, 100 to 3000 bp, sufficient for 250 lanes (loading 2 µl per gel), 1x0,5 ml	1 KIT	733-2579

DNA LADDERS, 50 BP, PEQGOLD

DNA ladder for quantitative and qualitative analysis of dsDNA.

- Range: 13 distinct fragments 50 to 1000 bp in size
- Two highlighted bands for easy orientation
- Also available as ready to use mix containing Orange G dye instead of bromophenol blue

Description	Pk	Cat. No.
DNA ladder, 50 bp (concentrated), 500 ng/µl, 1x100 µl, sufficient for 50 lanes	1	25-2000

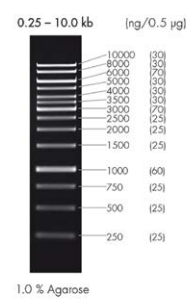


DNA LADDER, 100 BP, PEQGOLD

DNA ladder for quantitative and qualitative analysis of dsDNA.

- Range: 10 fragments, 100 to 1000 bp in size
- Highlighted 500 bp band for easy orientation
- Also available as ready to use mix containing Orange G dye instead of bromophenol blue

Description	Pk	Cat. No.
DNA ladder, 100 bp (concentrated), 500 ng/µl, 1x100 µl, sufficient for 50 lanes	1	25-2010

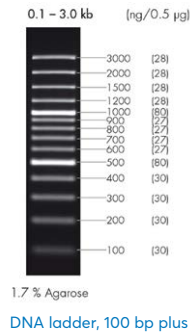


DNA LADDER, 1 KB, PEQGOLD

DNA ladder for quantitative and qualitative analysis of dsDNA.

- Range: 14 fragments, 250 to 10 000 bp in size
- Three highlighted bands for easy orientation
- Also available as ready to use mix containing Orange G dye instead of bromophenol blue

Description	Pk	Cat. No.
DNA ladder, 1 kb (concentrated), 500 ng/µl, 5x100 µl, sufficient for 250 lanes	1 KIT	25-2030



DNA ladder, 100 bp plus

DNA LADDER, 100 BP PLUS, PEQGOLD

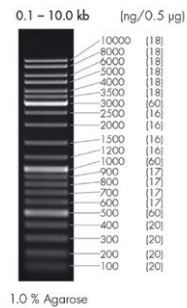
peqGOLD DNA ladder 100 bp plus is ideal for size determination in the range of 100 to 3000 base pairs. There are no unspecific bands besides the fragments described. 1000 and 500 bp bands have a higher DNA content and serve as a size reference.

- Composed of 14 chromatography-purified individual DNA fragments: 3000, 2000, 1500, 1200, 1000, 900, 800, 700, 600, 500, 400, 300, 200 and 100 base pairs

Product comprises of 100 µl (50 µg) DNA ladder and 1 ml 6X loading buffer (10 mM Tris-HCl, pH 7,6; 0,03% bromophenol blue; 0,03% xylene cyanol; 60% glycerol and 60 mM EDTA)

The marker has to be dephosphorylated before being used in radioactive assays.

Description	Pk	Cat. No.
DNA ladder, 100 bp plus (concentrated), 500 ng/µl, 1x100 µl, sufficient for 50 lanes	1	25-2020

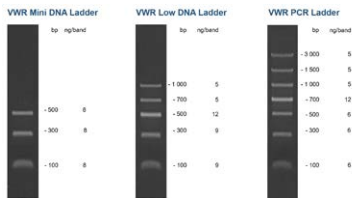


DNA LADDER MIX, PEQGOLD

DNA ladder for quantitative and qualitative analysis of dsDNA.

- Range: 21 fragments, 100 to 10 000 bp in size
- Three highlighted bands for easy orientation
- Also available as ready to use mix containing Orange G dye instead of bromophenol blue

Description	Pk	Cat. No.
DNA ladder mix (concentrated), 500 ng/µl, 5x100 µl, sufficient for 250 lanes	1	25-2040



Low DNA ladder

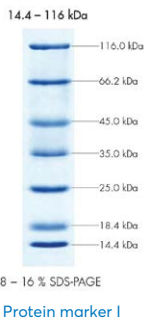
DNA LADDERS

VWR DNA ladders are convenient dsDNA ladders supplied in a loading buffer, which are ready to use on agarose and SDS DNA gels.

- Ready to use loading buffer
- For direct loading and easy visualisation
- Suitable with TBE and TAE electrophoresis systems
- Clear, distinct bands
- Blue dye front running at 100 to 300 bp at 0,5 to 1,5% agarose

Supplied in 0,5 ml packs for 100 lanes.

Description	Pk	Cat. No.
Mini DNA ladder, 100 – 500 bp	100 Tests	733-2601
Low range DNA ladder, 100 – 1000 bp	100 Tests	733-2602
PCR ladder, 100 – 3000 bp	100 Tests	733-2603



Protein marker I

PROTEIN MARKER I (UNSTAINED), PEQGOLD

peqGOLD Protein Marker I is a mixture of seven purified proteins which are re-dissolved 'ready to use' in loading buffer. The proteins resolve into sharp, tight bands in the range of 14,4 to 116,0 kDa when analysed by SDS-PAGE and stained with Coomassie Brilliant Blue R-250.

Mini gel application: 5 to 10 µl/well

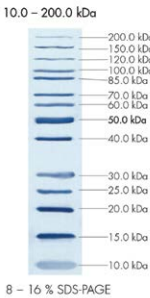
Standard gel application: 10 to 20 µl/well

peqGOLD Protein Marker I is optimised for runs on 12% SDS polyacrylamide gels. 8 to 10% gels may cause proteins with low molecular weights to migrate with the dye front. On 12 to 15% and gradient gels all bands are visible.

The marker is optimised for use with Coomassie Brilliant Blue R-250, but can also be used with other gel staining methods (e.g. silver staining). As this method is 10 to 100 times more sensitive than Coomassie Blue staining, the amount of marker applied should be decreased accordingly.

peqGOLD Protein Marker I contains 2% SDS and is, therefore, not recommended to be used in native polyacrylamide gels for determining native molecular weights of proteins.

Description	Pk	Cat. No.
Protein Marker I (unstained, ready to use), 2x1000 µl, sufficient for 400 mini gels or 200 standard gels	1 KIT	27-1010



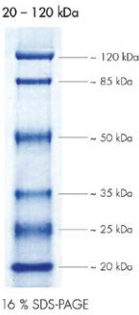
8 – 16 % SDS-PAGE

PROTEIN MARKER II (UNSTAINED), PEQGOLD

Protein Marker II for accurate molecular weight determination of proteins by SDS-PAGE.

- Mix of 14 recombinant proteins
- Range: 10 to 200 kDa
- Each protein with Strep-Tag® II sequence (WSHPQFEK)
- Highlighted 50 kDa band for easy orientation
- Ready to use for a fast, convenient workflow

Description	Pk	Cat. No.
Protein Marker II (unstained, ready to use), 2x250 µl, sufficient for 50 lanes	1 KIT	27-2010



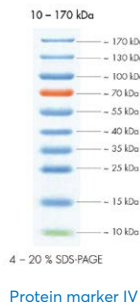
8 – 16 % SDS-PAGE

PROTEIN MARKER III (PRE-STAINED), PEQGOLD

Protein Marker III for monitoring protein separation, transfer efficiency and size determination.

- Mix of six highly purified proteins
- Range: 20 to 120 kDa
- Concentration: 200 ng/µl each protein
- Each protein covalently pre-stained with a blue colouring
- Ready to use for a fast, convenient workflow

Description	Pk	Cat. No.
Protein Marker III (pre-stained, ready to use), 2x250 µl, sufficient for 50 lanes	1 KIT	27-1110



PROTEIN MARKER IV (PRE-STAINED), PEQGOLD

peqGOLD pre-stained protein marker IV is a mixture of 10 recombinant, highly purified coloured proteins supplied 'ready to use' in loading buffer. The protein concentrations are optimised to yield well-defined bands directly visible in SDS-polyacrylamide gels.

- Comprises of 10 fragments: ~180, ~130, ~95, ~72, ~55, ~43, ~34, ~26, ~15 and ~10 kDa

Eight of the 10 proteins, ranging in apparent molecular weight from approximately 10 to 170 kDa, are coupled with a blue chromophore and resolve into clearly defined, sharp bands when analysed by SDS-PAGE. A 72 kDa protein is coupled with an orange dye and serves as a reference band. The 10 kDa band is green for easier orientation.

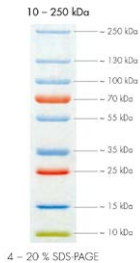
The protein marker can be used for approximate size estimation of unknown proteins, however, for precise determination of molecular weights the use of 'unstained' protein markers is recommended. The pre-stained marker is ideal for monitoring the progression of the gel run and Western transfer efficiency.

peqGOLD Protein Marker IV is optimised for runs on 4 to 20% SDS polyacrylamide gels. 8 to 10% gels may cause proteins with low molecular weights to migrate with the dye front.

Covalently-coupled chromophores affect protein mobility. peqGOLD pre-stained protein marker should be used only for approximate molecular weight determination.

peqGOLD Protein Marker IV contains 2% SDS and is, therefore, not recommended to be used in native polyacrylamide gels for determining native molecular weights of proteins.

Description	Pk	Cat. No.
Protein Marker IV (pre-stained, ready to use), 2x250 µl, sufficient for 100 mini gels or 50 standard gels	1 KIT	27-2110

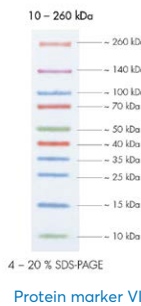


PROTEIN MARKER V (PRE-STAINED), PEQGOLD

Protein Marker V (pre-stained) for monitoring protein separation, transfer efficiency and size determination.

- Mix of nine recombinant proteins
- Covalently pre-stained by using one of three different dyes
- Range: 10 to 250 kDa
- Concentration: 100 to 200 ng/µl each protein
- Ready to use for a fast, convenient workflow

Description	Pk	Cat. No.
Protein Marker V (pre-stained, ready to use), 2x250 µl, sufficient for 50 lanes	1 KIT	27-2210



PROTEIN MARKER VI (PRE-STAINED), PEQGOLD

peqGOLD pre-stained Protein Marker VI is a mixture of 10 coloured proteins. These proteins are recombinantly produced in *E.coli*, highly purified and supplied 'ready to use' in loading buffer. The protein concentrations are optimised to yield well-defined bands directly visible in SDS polyacrylamide gels.

- Comprises of 10 fragments: ~260, ~140, ~95, ~72, ~52, ~44, ~34, ~26, ~17 and ~10 kDa

Four of the 10 proteins, with an apparent molecular weight of approximately 100, 35, 25 and 15 kDa, are coupled with a blue chromophore, whereas three proteins at 260, 70 and 40 kDa appear orange. Additionally two proteins at 50 and 10 kDa are labelled green, and one 140 kDa protein is coupled with a pink dye. All proteins resolve into clearly defined, sharp bands when analysed by SDS-PAGE.

This protein marker can be used for approximate size estimation of unknown proteins, however, for precise determination of molecular weights, the use of 'unstained' protein markers is recommended. The pre-stained marker is ideal for monitoring the progression of the gel run and the Western transfer efficiency.

Description	Pk	Cat. No.
Protein Marker VI (pre-stained, ready to use), 2x250 µl, sufficient 100 mini gels or 50 standard gels	1 KIT	27-2310



NUCLEIC ACID LOADING DYES

Designed to optimise loading nucleic acids in agarose gels, the loading dye imparts colour to the sample to facilitate the loading process and increase the density of the sample to ensure efficient sample distribution into each well. The dye migrates independently from the sample, allowing estimation of the migration of nucleic acids.

- Eliminates exposure to irritating and harmful powdered dyes
- Free from DNase, RNase and protease
- Functionally and analytically tested

Description	Concentration	Pk	Cat. No.
Agarose gel loading dye with 3 tracking dyes and 15% Ficoll	6X	5 ml	E190-5ML
Glycerol gel loading dye with 3 tracking dyes and 30% glycerol	5X	5 ml	E269-5ML
Glycerol gel loading dye with 3 tracking dyes and 30% glycerol	5X	1 ml	E269-1ML
Gel loading buffer (BPB) with bromophenol blue	4X	5 ml	K945-5ML



DNA loading dyes

DNA LOADING BUFFERS

These DNA loading dyes are used to load DNA samples to agarose or SDS DNA gels for gel electrophoresis.

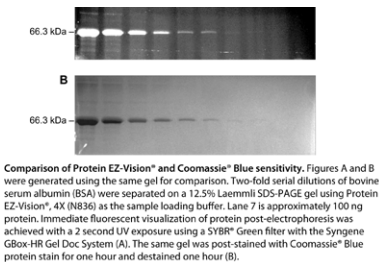
Suitable for TAE, TBE, SB and LB electrophoresis buffers.

EC Regulation No. 1907/2006 (REACH).

Each kit contains 5x1 ml.

Store at -20 °C for *in vitro* use only.

Description	Colour	Concentration	Pk	Cat. No.
Loading dye	Red	5X	1 KIT	733-2574
Loading dye	Blue	5X	1 KIT	733-2575
Loading dye	Orange	5X	1 KIT	733-2576



PROTEIN EZ-VISION®, 4X, BIOTECHNOLOGY GRADE

This 4X loading buffer includes a fluorescent dye that comigrates with the protein-SDS complex during electrophoresis. Protein EZ-Vision eliminates the need for post-staining and destaining and is compatible with downstream blotting applications.

- Biotechnology grade convenient loading buffer
- Compatible with downstream Western blotting
- Non toxic, non mutagenic formula completely eliminates the need to use methanol

Loading buffer with fluorescent protein dye offers a non hazardous alternative to Coomassie® Blue staining.

Includes two 1 ml tubes.

For research use only – not for therapeutic or diagnostic use.

Description	Pack type	Pk Info	Pk	Cat. No.
Protein EZ-Vision®, 4X, Biotechnology Grade	vial	2 x 1 ml	2 ml	N836-KIT

LAEMMLI LOADING BUFFER, 4X

Laemmli loading buffer, 4X is formulated for use in Laemmli SDS-PAGE, a widely used system for protein electrophoresis.

- Pre-mixed for convenience
- 4X concentration allows more volume for protein per lane
- Store at room temperature

Mixing Laemmli loading buffer, 4X with samples reduces disulphide bonds and denatures the proteins due to the 2-mercaptoethanol and SDS detergent content of the buffer. The binding of SDS to denatured protein imparts uniform negative charge density so that separation on the gel is based on size. Glycerol is included in the loading buffer as a density agent to ensure the samples sink into the sample wells, while bromophenol blue serves as tracking dye to monitor electrophoretic progression.

Description	Pk	Cat. No.
Laemmli loading buffer, 4X	25 ml	M337-25ML

PROTEIN GEL LOADING BUFFERS, 2X, ULTRA PURE GRADE

Loading dyes are designed to optimise loading DNA, RNA, and proteins in acrylamide and agarose gels.

- Protease tested
- Functionally and analytically tested to ensure consistency and quality
- Used for denaturing protein electrophoresis

Ready to use format eliminates exposure to irritating and potentially harmful powdered dyes. All VWR loading dyes feature our exclusive blend of three tracking dyes that make estimating sample migration simple and reliable.

Dye #1: A light blue dye that migrates at 4000 base pairs in 1% agarose

Dye #2: An indigo dye that migrates at about 600 base pairs in 1% agarose

Dye #3: A magenta dye that migrates at 150 base pairs in 1% agarose

Contains 2% SDS and 10% glycerol for denaturing gel sample preparation.

Loading dyes serve three functions in electrophoresis. First, dyes impart colour to the sample to facilitate the loading process. Second, loading dyes increase the density of the sample to ensure efficient sample distribution into each well. Third, the dyes themselves migrate independently from the samples, allowing the user to estimate the migration of nucleic acids or proteins.

Description	Pk	Cat. No.
Protein gel loading buffer, 2X, containing glycerol and SDS	5 ml	E270-5ML

XYLENE CYANOLE FF, ULTRAPURE

Description	Pack type	Pk	Cat. No.
Xylene cyanole FF, ultrapure	Glass bottle	20 g	0819-20G

BROMOPHENOL BLUE ACS

A tracking dye for nucleic acid and protein gels. Also a pH indicator (yellow to blue, range 3,0 to 4,6).

Description	Pk	Cat. No.
Bromophenol blue ACS	25 g	0449-25G
Bromophenol blue ACS	50 g	0449-50G
Bromophenol blue ACS	100 g	0449-100G



Taq DNA POLYMERASE MASTER MIX

VWR® *Taq* DNA Polymerase Master Mix is a ready to use 1,1X or 2X reaction mix. Simply add primers, template and water to carry out primer extensions and other molecular biology applications.

VWR® Red *Taq* DNA Polymerase Master Mix, which also contains an inert red dye, can be directly loaded onto an agarose gel without addition of electrophoresis loading buffers.

Tests = Reactions

Description	Pk	Cat. No.
Red <i>Taq</i> DNA Polymerase 1,1X Master Mix, 1,5 mM MgCl ₂	500 Tests	733-2544
Red <i>Taq</i> DNA Polymerase 1,1X Master Mix, 1,5 mM MgCl ₂	2.500 Tests	733-1318
Red <i>Taq</i> DNA Polymerase 1,1X Master Mix, 2,0 mM MgCl ₂	500 Tests	733-2545
Red <i>Taq</i> DNA Polymerase 1,1X Master Mix, 2,0 mM MgCl ₂	2.500 Tests	733-1319
Red <i>Taq</i> DNA Polymerase 2X Master Mix, 1,5 mM MgCl ₂	500 Tests	733-2546
Red <i>Taq</i> DNA Polymerase 2X Master Mix, 1,5 mM MgCl ₂	2.500 Tests	733-1320
Red <i>Taq</i> DNA Polymerase 2X Master Mix, 1,5 mM MgCl ₂	5.000 Tests	733-2130
Red <i>Taq</i> DNA Polymerase 2X Master Mix, 1,5 mM MgCl ₂	10.000 Tests	733-2131
Red <i>Taq</i> DNA Polymerase 2X Master Mix, 1,5 mM MgCl ₂	20.000 Tests	733-2132
Red <i>Taq</i> DNA Polymerase 2X Master Mix, 2,0 mM MgCl ₂	500 Tests	733-2547
Red <i>Taq</i> DNA Polymerase 2X Master Mix, 2,0 mM MgCl ₂	2.500 Tests	733-1321



ETHIDIUM BROMIDE 0,625 MG/L IN AQUEOUS SOLUTION, BIOTECHNOLOGY GRADE

Ethidium bromide solution is a fluorescent stain for visualising nucleic acids in solution or in electrophoresis gels. The solution is provided at a concentration of 0,625 mg/ml. A final working concentration of 0,5 g/ml is easily obtained by adding one drop of solution to 50 ml of molten agarose, running buffer or staining buffer. Ethidium bromide solution in dropper bottles may be stored at room temperature for up to one year.

- Used to detect as little as 10 ng of nucleic acid
- Dropper bottles are shatter-resistant and light-proof
- No additional hazardous shipping costs are applied to ethidium bromide dropper bottles

At a concentration of 0,5 µg/ml, ethidium bromide is useful in agarose or acrylamide gels for band detection.

At higher concentrations (0,5 to 1,0 µg/ml), it may be used to facilitate purification of DNA in a caesium chloride gradient.

One drop diluted into 50 ml of molten agarose or buffer yields a final concentration of 0,5 µg/ml.

In 0,625 mg/ml dropper bottles.

Description	Pack type	Pk	Cat. No.
Ethidium bromide 0,625 mg/l in aqueous solution, Biotechnology Grade	Dropper bottle	5 ml	E406-5ML
Ethidium bromide 0,625 mg/l in aqueous solution, Biotechnology Grade	Dropper bottle	15 ml	E406-15ML

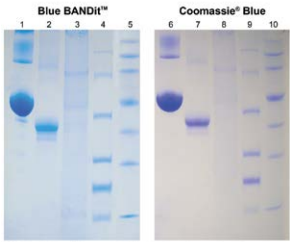


DESTAINING BAGS

Destaining bags are designed to safely remove ethidium bromide from solution during overnight treatment. Each bag extracts up to 5 mg of ethidium bromide from solution, thus minimising the exposure of research personnel to this toxic material. The special absorbent mixture retains dye molecules in a convenient bag for removal and incineration.

- Removes up to 5 mg ethidium bromide per bag
- Minimises exposure to toxic materials
- Easiest ethidium bromide removal available

Description	Pk	Cat. No.
Destaining bags	25	E732-25



BlueBANDit™ and Coomassie® Blue Staining Comparison. A 12.5% Fluorescent SPRINT NEXT GEL® (M318) was loaded with 10 µg BSA (lanes 1, 6), 5 µg ovalbumin (lanes 2, 7), 2 µg K562 cytoplasmic lysate (lanes 3 and 8), 10 µl Molecular Weight Marker (lanes 4, 9), and 10 µl Precision™ Protein Molecular Weight Marker (lanes 5, 10). Following electrophoresis, the gel was cut in half. Lanes 1-5 were stained with BlueBANDit™ (K217) and lanes 6-10 were stained with Coomassie® Blue.

COOMASSIE® BRILLIANT BLUE G-250, ULTRA PURE GRADE

Coomassie Brilliant Blue is a common stain used for the detection of protein bands following electrophoresis.

Description	Pack type	Pk	Cat. No.
Coomassie® brilliant blue G-250, Ultra Pure Grade	Glass bottle	10 g	0615-10G
Coomassie® brilliant blue G-250, Ultra Pure Grade	Glass bottle	25 g	0615-25G
Coomassie® brilliant blue G-250, Ultra Pure Grade	Plastic bottle	50 g	0615-50G

PONCEAU S, PROTEOMICS GRADE

Description	Pack type	Pk	Cat. No.
Ponceau S, Proteomics Grade	Plastic bottle	500 ml	K793-500ML

COOMASSIE® BRILLIANT BLUE R-250, ULTRAPURE

Commonly used stain for the detection of protein bands following electrophoresis.

Description	Pack type	Pk	Cat. No.
Coomassie® brilliant blue R-250, ultrapure	Amber bottle	10 g	0472-10G
Coomassie® brilliant blue R-250, ultrapure	Amber bottle	25 g	0472-25G
Coomassie® brilliant blue R-250, ultrapure	HDPE bottle	50 g	0472-50G

PROTEIN STAIN, BLUE BANDIT™

Blue BANDit is a safe and environmentally friendly alternative to traditional Coomassie® Blue staining.

- Reduces handling of hazardous chemicals: No methanol or acetic acid required
- High sensitivity, quick, simple procedure

Environmentally preferable attribute	Safer Human and Environmental Health
--------------------------------------	--------------------------------------

Description	Pk	Cat. No.
Protein stain for 12 mini gels	250 ml	K217-250ML
Protein stain for 50 mini gels	1 l	K217-1L

PONCEAU S, HIGH PURITY

A substitute for acid fuchsin in Van Gieson stain. Also used for staining proteins after electrophoresis.

Description	Pack type	Pk	Cat. No.
Ponceau S, high purity	Amber bottle	50 g	0860-50G
Ponceau S, high purity	HDPE bottle	100 g	0860-100G



Solutions for discovery

VWR® PCR

Innovations and essentials for your PCR workflow!

Don't miss our great range of PCR cyclers, workstations, consumables, reagents and complementary equipment!

Download the brochure

PB19059-EN

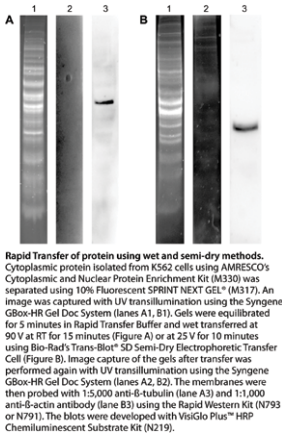
BLOTTING REAGENTS & CONSUMABLES

SSC BUFFER, 20X, ULTRA-PURE GRADE

SSC buffer is a hybridisation buffer for Northern and Southern blots.

Supplied as either 20X liquid concentrate or Ready-Pack™ that prepares 1 litre of 20X concentrate.

Description	Pk Info	Pk	Cat. No.
SSC buffer, 20X liquid concentrate	-	4 l	0804-4L



RAPID TRANSFER BUFFER 10X

Rapid transfer buffer is a simple, single component system for quick and efficient transfer of proteins from SDS-PAGE gels to membranes for Western blotting applications. Transfer is completed in 10 or 20 minutes using a standard semi-dry or wet transfer apparatus, respectively.

- Utilises standard transfer equipment
- Non hazardous formulation
- Transfers to PVDF and nitrocellulose from multiple types of gels

Rapid transfer buffer is a methanol-free, non hazardous formulation that is compatible with PVDF and nitrocellulose membranes. The transfer efficiency is equivalent to that observed when using a Tris-glycine-methanol transfer buffer.

Environmentally preferable attribute	Safer Human and Environmental Health		
Description	Pk	Cat. No.	
Rapid transfer buffer, 10X	4 l	N789-4L	

TRANSFER BUFFER CONCENTRATE, CAPS 10X

For transfer of protein to membranes for sequencing or blotting.

Description	Pk	Cat. No.
CAPS transfer buffer, liquid concentrate (10X)	500 ml	K872-500ML

PBS AND TBS WASH BUFFERS, ULTRA PURE GRADE

Wash buffers ideal for use in applications such as Western blotting and ELISA. Prevents high background by effectively removing unbound reagents.

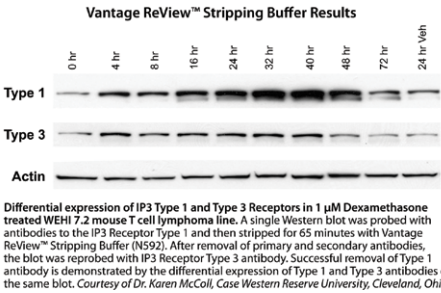
Description	Pk	Cat. No.
TBS, 20X Ready-Pack™, each pack prepares 1 l of 20X concentrate, Ultra Pure Grade	2	0788-2PK
TBS, 20X liquid concentrate, prepares 80 l of 1X buffer, Ultra Pure Grade	4 l	J640-4L

TBS/TWEEN® WASHING BUFFER, 20X LIQUID CONCENTRATE, ULTRA PURE GRADE

Convenient liquid concentrate that produces 10 litres of 1X buffer for blotting and ELISA applications.

- Prevents high background by effectively removing unbound reagents

Description	Pk	Cat. No.
TBS/Tween® 20 liquid concentrate, blot washer buffer, (20X), Ultra Pure Grade	500 ml	K873-500ML



STRIPPING BUFFER, VANTAGE REVIEW™

A ready to use buffer for removal of tightly associated antibodies on Western blots.

- Remove high affinity antibodies with minimal loss of bound antigen
- Conserve scarce antigen and valuable antibodies
- Odour-free – no β-mercaptoethanol

Description	Pk	Cat. No.
Stripping buffer, Vantage ReView™	500 ml	N592-500ML

BLOTTING REAGENTS & CONSUMABLES

BSA (BOVINE SERUM ALBUMIN)

A protease-free grade albumin for RIA and ELISA applications, produced by a heat-shock process in caprylic acid.

- Protease-free
- IgG-free
- Moisture: 5%

CAS No.	9048-46-8
Colour	Light yellow
pH	6,8 - 7,2
Protein synonyms	BSA, Fraction V, Cohn Fraction V, Bovine Serum Albumin
Protein/peptide name	Albumin
Purity	98%
Source	Serum
Species	Bovine
Storage conditions	Refrigerator

Pack type	Pk	Cat. No.
Glass bottle	100 g	422361V

BSA (BOVINE SERUM ALBUMIN), NUCLEASE-FREE, PROTEASE-FREE, BIOTECHNOLOGY GRADE

Heat shock isolated bovine serum albumin (BSA) suitable for use in a wide range of molecular biology applications, including Western blotting.

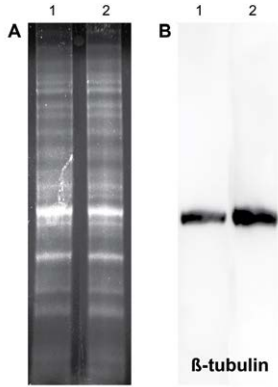
- Nuclease-free
- Protease-free
- Heavy metals (as Pb) <0,001%
- Iron <0,0005%
- Purity >98%
- Powder form

A standard grade albumin for basic applications, produced by a heat-shock process in caprylic acid.

pH (5%, water) @ 25 °C 6,5 to 7,5.

CAS No.	9048-46-8
Colour	Light yellow
Grade	For biotechnology
Nuclease-free	Yes
Protease-free	
Protein synonyms	BSA, Fraction V, Cohn Fraction V, Bovine Serum Albumin
Protein/peptide name	Albumin
Source	Serum
Species	Bovine
Storage conditions	Refrigerator

Pk	Cat. No.
100 g	0332-100G
1 kg	0332-1KG
500 g	0332-500G



RapidBlock™ for Western blotting. Cytoplasmic protein (10 µg) isolated from K562 cells with AMRESCO's Cytoplasmic/ Nuclear Fractionation Kit (M330) was resolved using 12.5% Fluorescent SPRINT NEXT GEL® (M318). Total protein and band resolution were determined by visualization on a UV transilluminator prior to transfer to PVDF membrane using NEXT GEL® Transfer Buffer (M279, lanes A1, A2). The membrane was cut into strips and blocked 5 minutes in either TBST/5% non-fat dry milk (lane B1) or AMRESCO's RapidBlock™ Solution (lane B2). The blots were probed with β-tubulin antibody diluted 1:5,000 in their respective blocking solutions and detected with VisiGlo Plus™ HRP Chemiluminescent Substrate Kit (N219).

RAPIDBLOCK™ SOLUTION, 10X

RapidBlock™ solution reduces blocking time to 5 minutes for Western and dot blotting procedures on PVDF and nitrocellulose membranes. This protein-free formulation minimises cross-reactivity and non specific antibody binding, generating blots with low background and enhanced signal-to-noise ratio.

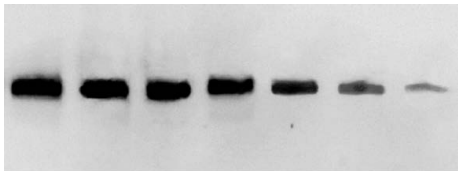
- Only 5 minutes for PVDF or nitrocellulose blocking
- Reduce background and cross-reactivity
- Enhance chemiluminescent signals
- Protein-free formulation

Description	Pk	Cat. No.
RapidBlock™ solution, 10X	100 ml	M325-100ML

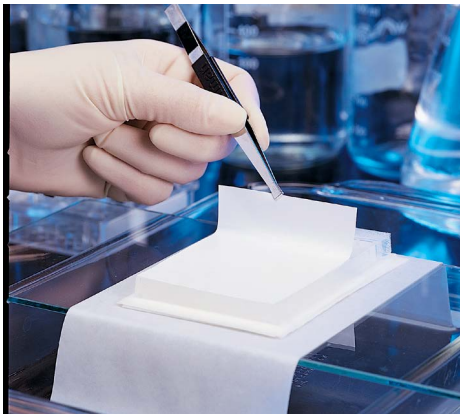
MILK POWDER, NON FAT (SKIMMED MILK), PROTEOMICS GRADE

10 g per pack.

Description	Pack type	Pk Info	Pk	Cat. No.
Milk powder, non fat (skimmed milk), Proteomics Grade	Set of items	10x10	100 g	M203-10G-10PK



Detection of ovalbumin with VisiGlo™ HRP Chemiluminescent Substrate Kit. Two-fold serial dilutions of ovalbumin (960 ng – 20 ng) were separated on a 12.5% Fluorescent SPRINT NEXT GEL® (M318) and then transferred and blotted with ovalbumin antibody using a Rapid Western Blotting Kit (N790). The blot was developed with VisiGlo™ HRP Chemiluminescent Substrate Kit (N218) and the image captured with a Syngene gel documentation system.



HRP CHEMILUMINESCENT SUBSTRATE KITS, VISIGLO™

VisiGlo™ HRP chemiluminescent substrates are luminol-based chemiluminescent substrates designed for rapid and sensitive detection of peroxidase-labelled conjugates. Sensitivity ranges from picogram levels, captured by VisiGlo™ HRP chemiluminescent substrate, down to femtogram levels, exhibited by VisiGlo™ Prime and VisiGlo™ Select. VisiGlo™ Select displays the highest sensitivity, ideal for detecting low abundance proteins. The signal generated by substrate incubation is sustained between 8 to 10 hours allowing you to perform multiple exposures over an extended period of time.

- Highly sensitive substrates save precious protein samples and antibodies
- Low background without compromising signal intensity
- Quantitative with broad dynamic range
- Long lasting signal
- Compatible with CCD and X-ray film imaging systems

VisiGlo™ Select HRP chemiluminescent substrate kit combines a broad linear dynamic range and attomolar sensitivity to enable quantitation of low abundance targets labelled with horseradish peroxidase (HRP). Low intensity signals undetectable with competing chemiluminescent substrates may be revealed as well, because background levels remain low even for lengthy exposure times. The signal generated by substrate incubation is stable for hours and may be captured by conventional X-ray film, CCD and fluorescence-based imaging systems.

VisiGlo™ Prime HRP chemiluminescent substrate kit delivers a wide dynamic range of HRP detection that is linear over three orders of magnitude, enabling accurate and quantitative comparison of proteins, especially when combined with CCD imaging. Highly sensitive VisiGlo Prime is ideal for detection of low abundance proteins, with sensitivity down to attomolar levels. High abundance proteins are detected without exhibiting substrate depletion, an important feature for simultaneous detection of low and high abundance proteins in a single exposure. The chemiluminescent emission from VisiGlo™ Prime is highly stable, lasting hours after substrate incubation to allow time for multiple exposures to obtain optimal blotting images.

High sensitivity and signal-to-noise ratio allow for target detection with minimal consumption of valuable protein and antibody reagents, thereby lowering experimental costs.

Description	Pk	Cat. No.
VisiGlo™ Prime HRP chemiluminescent substrate kit, sufficient for 1000 cm² of membrane	1 KIT	1B1581KIT100ML
VisiGlo™ Select HRP chemiluminescent substrate kit, sufficient for 1000 cm² of membrane	1 KIT	1B1583KIT100ML

TRANSFER MEMBRANES, FLUOROTRANS® PVDF

Naturally hydrophobic PVDF, ideal for a wide variety of protein-analysis applications. The family of FluroTrans® media are white, microporous solid phase supports that bind proteins tenaciously via hydrophobic interactions. FluroTrans® membrane is optimised for N-terminal protein sequencing. FluroTrans® W membranes are optimised for Western transfer applications. They allow for sensitive protein detection with low background and very low protein burn-through. Immobilised proteins can be visually detected with Coomassie® Blue, Amido black, Ponceau S, and colloidal gold.

- High protein binding capacity - typically absorbs 50% more protein than nylon or nitrocellulose
- High tensile strength, so won't tear, crack or curl during handling, allowing easy removal of target bands for protein sequencing applications
- High sensitivity for small peptides

Pore size: 0,2 µm

Typical thickness: 127 µm

Description	Dimensions (mm)	Pk	Cat. No.
FluoroTrans® membrane			
Sheets	70×84	10	516-0219
Sheets	85×90	20	516-0220
Sheets	130×140	10	516-0222
Rolls	260×3000	1 Roll	516-9757
Rolls	300×3300	1 Roll	516-0224
FluoroTrans® W membrane			
Sheets	100×150	10	516-0225
Sheets	70×90	10	516-0248
Sheets	200×200	10	516-0226



TRANSFER MEMBRANES, BIOTRACE™ NT

Pure unsupported nitrocellulose membrane ideally suited for colony and plaque lifts and protein transfers.

- Strong and durable, less likely to tear or crack
- High binding capacity for proteins and nucleic acids
- Low protein burn-through in electrophoretic transfers

Pore size: 0,2 µm

Typical thickness: 145 µm

Protein binding capacity: 209 µg/cm²

Description	Dimensions (mm)	Pk	Cat. No.
Sheets	70×85	10	516-9022
Sheets	200×200	10	732-3035
Roll	300×3000	1 Roll	732-3031



BLOTTING PAPER, GRADE 703

Ideal for use as wicks in protein and nucleic acid blotting. Provides a uniform flow of buffer through the gel to the transfer membrane in a blotting sandwich. Also suitable for use in removing gels from glass supports.

- Made of 100% cotton fibre
- Uniform and smooth
- Produced using ultra-pure water
- Contains no additives

Grade	703
Weight	185 g/m²
Thickness	0,38 mm
Herzberg flow rate	250 s per 100 ml at 10 cm head of water
Klemm wicking rate test	626 s per 7,5 cm rise

Description	Dimensions (mm)	Pk	Cat. No.
Sheets	70×100	100	732-0596
Sheets	100×150	100	732-0605
Sheets	140×160	100	732-0603
Sheets	150×150	100	732-0607
Sheets	200×200	100	732-0593
Sheets	460×570	100	732-0591



BLOTTING PADS, GRADE 707

This super thick paper is used to complete the blotting sandwich. Smooth, uniform texture ensures continuous contact of buffer from the chamber through the gel and transfer membrane.

- Made of 100% cotton fibre
- Produced using ultra-pure water
- Contains no additives
- Cleaner and more consistent than paper towels

Grade	707
Weight	703 g/m²
Thickness	2,60 mm
Herzberg flow rate	120 s per 100 ml at 10 cm head of water
Klemm wicking rate test	96 s per 7,5 cm rise

Description	Dimensions (mm)	Pk	Cat. No.
Sheets	50×75	50	732-0608
Sheets	70×80	50	732-0604
Sheets	70×100	50	732-0594
Sheets	100×140	50	732-0598
Sheets	110×130	50	732-0601
Sheets	110×140	50	732-0595
Sheets	110×180	50	732-0600
Sheets	130×200	50	732-0602
Sheets	140×160	50	732-0599
Sheets	140×200	50	732-0597
Sheets	160×180	50	732-0606
Sheets	200×200	50	732-0592

BUFFERS & BUFFER COMPONENTS

TAE (TRIS-ACETATE-EDTA) BUFFER, ULTRA PURE GRADE

TAE is an extensively used buffer for agarose gel electrophoresis applications requiring high resolution and separation of high molecular weight, double-stranded DNA. TAE buffer is more compatible with in-gel manipulations and band recovery procedures than TBE buffer.

- Ideal for DNA recovery and in-gel manipulations
- Low ionic strength
- Better resolution of large DNA fragments (>12 kb DNA)
- Convenient packaging options minimise weighing and mixing

Composition of (1X) TAE buffer: 0,04 M Tris-acetate; 0,001 M EDTA; final pH 8,0.

Description	Pk	Cat. No.
TAE buffer, 25X liquid concentrate	1,6 l	0796-1.6L
TAE buffer, 25X liquid concentrate	4 l	0796-4L
TAE buffer, 50X liquid concentrate	1,6 l	K915-1.6L
TAE buffer, 50X liquid concentrate	4 l	K915-4L

TBE (TRIS-BORATE-EDTA) BUFFER



TBE is optimised for DNA electrophoresis techniques using both acrylamide and agarose. Buffers are available as liquid concentrate or Ready-Pack™ (a foil pouch containing sufficient material to prepare 1 litre of 10X concentrate).

- High buffering capacity
- High ionic strength
- Allows extended electrophoresis runs without buffer recirculation
- Convenient packaging options minimise weighing and mixing
- Free from DNase, RNase and protease

Composition of (1X) solution contains 0,089 M Tris base, 0,089 M borate and 0,002 M EDTA, disodium salt, dihydrate with a final pH of 8,3.

*Note: TBE has a tendency to precipitate over time. If this occurs, redissolve in solution.

Description	Pk	Cat. No.
TBE buffer, 10X Ready-Pack™, each pack makes 1 L of 10X TBE buffer	2	0478-2PK
TBE buffer, 1X solution	1 kg	0478-40L
TBE buffer, 10X liquid concentrate	1 l	0658-1L
TBE buffer, 10X liquid concentrate	4 l	0658-4L
TBE buffer solution 5X concentrate (TRIS-borate-EDTA buffer), ultrapure	1 l	J885-1L
TBE buffer solution 5X concentrate (TRIS-borate-EDTA buffer), ultrapure	4 l	J885-4L

TBE BUFFER SOLUTION, 10X CONCENTRATE (TRIS-BORATE-EDTA BUFFER), ULTRA PURE GRADE

pH (1:10) @ 25 °C: 8,20 to 8,40

Description	Pk	Cat. No.
TBE buffer solution 10X concentrate (Tris-borate-EDTA buffer)	500 ml	E442-500ML

MOPS (γ-(N-MORPHOLINO)PROPANESULPHONIC ACID) ≥99%, ULTRAPURE

MOPS is a zwitterionic buffer used as a running buffer for denaturing agarose gel electrophoresis of RNA.

Description	Pack type	Pk	Cat. No.
MOPS (γ-(N-Morpholino)propanesulphonic acid) ≥99%, ultrapure	Glass bottle	100 g	0670-100G
MOPS (γ-(N-Morpholino)propanesulphonic acid) ≥99%, ultrapure	Glass bottle	250 g	0670-250G
MOPS (γ-(N-Morpholino)propanesulphonic acid) ≥99%, ultrapure	Glass bottle	500 g	0670-500G

MOPS 10X BUFFER FOR BIOTECHNOLOGY



MOPS is a zwitterionic buffer used as a running buffer for denaturing agarose gel electrophoresis of RNA. Having a pH buffering range from 6,5 to 7,9, MOPS works exceptionally well with formaldehyde gels at 20 mM concentration.

- Optimised for RNA agarose electrophoresis
- Ideal for use with RNA formaldehyde gels

Description	Pk	Cat. No.
MOPS, 10X liquid concentrate, nuclease-free, makes 5 L of 1X solution	500 ml	E526-500ML

TRIS-GLYCINE BUFFER, ULTRA PURE GRADE

A pre-blended Tris-glycine powder for preparation of Laemmli SDS-PAGE running buffer.

The 40 l pack size prepares 40 litres of 1X Tris-glycine solution (0,025 M Tris base and 0,192 M glycine). Each Ready-Pack™ prepares 1 litre of a 10X concentrate.

Description	Pk	Cat. No.
TG buffer, Ready-Pack™, each pack makes 1 L of 10X concentrate	2	0251-2PK
TG buffer, prepares 40 L of 1X Tris-glycine solution	40 l	0251-40L

TRIS-GLYCINE BUFFER, PROTEOMICS GRADE

A pre-blended Tris-glycine powder for preparation of Laemmli SDS-PAGE running buffer. The 40 litre pack size prepares 40 litres of 1X Tris-glycine solution (0,025 M Tris base and 0,192 M glycine). Each Ready-Pack™ prepares 1 litre of a 10X concentrate.

Description	Pk	Cat. No.
Tris-glycine buffer, prepares 40 L of 1X Tris-glycine solution	40 l	M115-40L

TRIS-GLYCINE-SDS BUFFER, READY-PACK™, ULTRA PURE GRADE

TG-SDS buffer for preparation of Laemmli SDS-PAGE running buffer.

The 40 litre pack size includes sufficient powder to prepare 40 litres of a 1X solution (0,025 M Tris, 0,192 M glycine and 0,1% SDS). Each Ready-Pack™ prepares 1 litre of a 10X solution.

Description	Pk	Cat. No.
TG SDS buffer	40 l	0147-40L

BUFFERS & BUFFER COMPONENTS

TRIS-GLYCINE-SDS (TGS) BUFFER SOLUTION, 10X LIQUID CONCENTRATE, ULTRA PURE GRADE

Liquid concentrate used for protein electrophoresis to maintain pH and temperature of the environment as well as provide ions that carry electrical current.

Description	Pk	Cat. No.
TG SDS buffer, 10X concentrate	1 l	0783-1L
TG SDS buffer, 10X concentrate	4 l	0783-4L

NEUTRAL pH POLYACRYLAMIDE GEL ELECTROPHORESIS BUFFERS

For high resolution of proteins on neutral pH SDS-PAGE gels.

Description	Pk	Cat. No.
MOPS-SDS buffer, 20X concentrate	500 ml	K855-500ML
MES-SDS buffer, 20X concentrate	500 ml	K856-500ML

RUNNING BUFFER (20X), NEXT GEL®

Recommended for optimum gel performance when using NEXT GEL® ready to pour acrylamide solutions.

Description	Pk	Cat. No.
NEXT GEL® running buffer, 20X, Proteomics grade	500 ml	M259-500ML

WATER FOR MOLECULAR BIOLOGY

Description	Pack type	Pk	Cat. No.
Water for molecular biology	Bag-in-box (Cubitainer)	10 l	445847D

WATER, ANALAR® NORMAPUR® ISO 3696 GRADE 3 ANALYTICAL REAGENT

Produced by reversed osmosis and CDI

Description	Pack type	Pk	Cat. No.
Water, Analar® NORMAPUR® ISO 3696 Grade 3 analytical reagent	Plastic bottle	2,5 L	102922B
Water, Analar® NORMAPUR® ISO 3696 Grade 3 analytical reagent	Plastic container	5 l	102923C
Water, Analar® NORMAPUR® ISO 3696 Grade 3 analytical reagent	Plastic drum	10 l	102926D
Water, Analar® NORMAPUR® ISO 3696 Grade 3 analytical reagent	Bag-in-box (cubitainer)	10 l	102927G
Water, Analar® NORMAPUR® ISO 3696 Grade 3 analytical reagent	Plastic drum	25 l	102928H

UREA ≥99.5%, HIGH PURITY

Commonly used to denature nucleic acids for electrophoresis and to study the secondary and tertiary structure of proteins.

Effective for maintaining DNA in a highly denatured state during sequencing protocols, urea is also useful for accelerating the activity of Proteinase K digestions. Effectively denatures RNA. For use in nucleic electrophoresis applications.

Description	Pack type	Pk	Cat. No.
Urea ≥99.5%, high purity	Plastic bottle for solids	500 g	0568-500G
Urea ≥99.5%, high purity	Plastic bottle for solids	1 kg	0568-1KG

HYDROCHLORIC ACID 37%, ANALAR® NORMAPUR® REAG. PH. EUR. ANALYTICAL REAGENT

Description	Pack type	Pk	Cat. No.
Hydrochloric acid 37%, Analar® NORMAPUR® Reag. Ph. Eur. analytical reagent	Glass bottle SAFEBREAK	1 l	20252.244
Hydrochloric acid 37%, Analar® NORMAPUR® Reag. Ph. Eur. analytical reagent	Glass bottle	1 l	20252.290
Hydrochloric acid 37%, Analar® NORMAPUR® Reag. Ph. Eur. analytical reagent	Plastic bottle	1 l	20252.295
Hydrochloric acid 37%, Analar® NORMAPUR® Reag. Ph. Eur. analytical reagent	Glass bottle SAFEBREAK	2,5 l	20252.324
Hydrochloric acid 37%, Analar® NORMAPUR® Reag. Ph. Eur. analytical reagent	Plastic bottle	2,5 L	20252.335
Hydrochloric acid 37%, Analar® NORMAPUR® Reag. Ph. Eur. analytical reagent	Glass bottle	2,5 l	20252.420

TRIS, TROMETAMOL (TRIS(HYDROXYMETHYL) AMINOMETHANE) ≥99.9% BUFFER SUBSTANCE, FOR ANALYSIS AND BIOCHEMICAL PURPOSES

Description	Pack type	Pk	Cat. No.
TRIS Trometamol (TRIS(hydroxymethyl) aminomethane) ≥99.9% buffer substance, for analysis and biochemical purposes	Plastic bottle for solids	1 kg	28808.294

TRIS, TROMETAMOL (TRIS(HYDROXYMETHYL) AMINOMETHANE) 99.8-100.5%, ANALAR® NORMAPUR® ANALYTICAL REAGENT

Description	Pack type	Pk	Cat. No.
TRIS,Trometamol (Tris(hydroxymethyl) aminomethane) 99.8-100.5%, Analar®NORMAPUR®analytical reagent	Plastic bottle for solids	250 g	103154M
TRIS,Trometamol (Tris(hydroxymethyl) aminomethane) 99.8-100.5%, Analar®NORMAPUR®analytical reagent	Plastic bottle for solids	1 kg	103156X
TRIS,Trometamol (Tris(hydroxymethyl) aminomethane) 99.8-100.5%, Analar®NORMAPUR®analytical reagent	Bucket (Plastic)	5 kg	103157P

ACETIC ACID GLACIAL 99.8-100.5%, ANALAR® NORMAPUR® ACS, REAG. PH. EUR. ANALYTICAL REAGENT

Description	Pack type	Pk	Cat. No.
Acetic acid glacial 99.8-100.5%, Analar® NORMAPUR® ACS, Reag. Ph. Eur. analytical reagent	Glass bottle SAFEBREAK	1 l	20104.243
Acetic acid glacial 99.8-100.5%, Analar® NORMAPUR® ACS, Reag. Ph. Eur. analytical reagent	Glass bottle	1 L	20104.298
Acetic acid glacial 99.8-100.5%, Analar® NORMAPUR® ACS, Reag. Ph. Eur. analytical reagent	Plastic bottle	1 l	20104.312
Acetic acid glacial 99.8-100.5%, Analar® NORMAPUR® ACS, Reag. Ph. Eur. analytical reagent	Glass bottle SAFEBREAK	2,5 l	20104.323
Acetic acid glacial 99.8-100.5%, Analar® NORMAPUR® ACS, Reag. Ph. Eur. analytical reagent	Plastic bottle	2,5 L	20104.334

ORTHOBORIC ACID 99.8-100.5%, CRYSTALLISED, ANALAR® NORMAPUR® ANALYTICAL REAGENT

Description	Pack type	Pk	Cat. No.
Orthoboric acid 99.8-100.5%, crystallised, Analar® NORMAPUR® analytical reagent	Plastic bottle for solids	500 g	20185.260
Orthoboric acid 99.8-100.5%, crystallised, Analar® NORMAPUR® analytical reagent	Plastic bottle for solids	1 kg	20185.297
Orthoboric acid 99.8-100.5%, crystallised, Analar® NORMAPUR® analytical reagent	Plastic bottle for solids	5 kg	20185.360

BUFFERS & BUFFER COMPONENTS

EDTA (ETHYLENEDIAMINE TETRAACETIC ACID) ≥99% ANALYTICAL REAGENT

Description	Pack type	Pk	Cat. No.
EDTA (ethylenediamine tetraacetic acid) ≥99% analytical reagent	Plastic bottle for solids	100 g	20301.186
EDTA (ethylenediamine tetraacetic acid) ≥99% analytical reagent	Plastic bottle for solids	1 kg	20301.290

EDTA DISODIUM SALT DIHYDRATE 99.0-101.0%, ANALAR® NORMAPUR® ACS, REAG. PH. EUR. ANALYTICAL REAGENT

Description	Pack type	Pk	Cat. No.
EDTA disodium salt dihydrate 99.0-101.0%, AnalAR® NORMAPUR® ACS, Reag. Ph. Eur. analytical reagent	Plastic bottle for solids	100 g	20302.180
EDTA disodium salt dihydrate 99.0-101.0%, AnalAR® NORMAPUR® ACS, Reag. Ph. Eur. analytical reagent	Plastic bottle for solids	250 g	20302.236
EDTA disodium salt dihydrate 99.0-101.0%, AnalAR® NORMAPUR® ACS, Reag. Ph. Eur. analytical reagent	Plastic bottle	500 g	20302.260
EDTA disodium salt dihydrate 99.0-101.0%, AnalAR® NORMAPUR® ACS, Reag. Ph. Eur. analytical reagent	Plastic bottle for solids	1 kg	20302.293

FORMALDEHYDE 36% IN AQUEOUS SOLUTION STABILISED, ANALAR® NORMAPUR® ACS, REAG. PH. EUR. ANALYTICAL REAGENT

Description	Pack type	Pk	Cat. No.
Formaldehyde 36% in aqueous solution stabilised, AnalAR® NORMAPUR® ACS, Reag. Ph. Eur. analytical reagent	Glass bottle	1 l	20909.290
Formaldehyde 36% in aqueous solution stabilised, AnalAR® NORMAPUR® ACS, Reag. Ph. Eur. analytical reagent	Plastic bottle	2,5 l	20909.330
Formaldehyde 36% in aqueous solution stabilised, AnalAR® NORMAPUR® ACS, Reag. Ph. Eur. analytical reagent	Plastic bottle	5 l	20909.368

FORMAMIDE ≥99.0%, ANALAR® NORMAPUR® ANALYTICAL REAGENT

Description	Pack type	Pk	Cat. No.
Formamide ≥99.0%, AnalAR® NORMAPUR® analytical reagent	Glass bottle	1 l	24311.291
Formamide ≥99.0%, AnalAR® NORMAPUR® analytical reagent	Glass bottle	2,5 l	24311.320

GLYCERINE ≥99.5%, ANALAR® NORMAPUR® ACS ANALYTICAL REAGENT, REDISTILLED

Description	Pack type	Pk	Cat. No.
Glycerine ≥99.5%, AnalAR® NORMAPUR® ACS analytical reagent, redistilled	Glass bottle	250 ml	24388.238
Glycerine ≥99.5%, AnalAR® NORMAPUR® ACS analytical reagent, redistilled	Plastic bottle	500 ml	24388.260
Glycerine ≥99.5%, AnalAR® NORMAPUR® ACS analytical reagent, redistilled	Glass bottle	1 l	24388.295
Glycerine ≥99.5%, AnalAR® NORMAPUR® ACS analytical reagent, redistilled	Glass bottle	2,5 l	24388.320

GLYCINE ≥99.5%, ANALAR® NORMAPUR® ANALYTICAL REAGENT

Description	Pack type	Pk	Cat. No.
Glycine ≥99.5%, AnalAR® NORMAPUR® analytical reagent	Plastic bottle for solids	250 g	101194M
Glycine ≥99.5%, AnalAR® NORMAPUR® analytical reagent	Plastic bottle for solids	1 kg	101196X
Glycine ≥99.5%, AnalAR® NORMAPUR® analytical reagent	Plastic bottle for solids	5 kg	10119CU

SODIUM ACETATE ≥99.0%, ANALAR® NORMAPUR® ACS, REAG. PH. EUR. ANALYTICAL REAGENT

Description	Pack type	Pk	Cat. No.
Sodium acetate ≥99.0%, AnalAR® NORMAPUR® ACS, Reag. Ph. Eur. analytical reagent	Plastic bottle for solids	250 g	27653.235
Sodium acetate ≥99.0%, AnalAR® NORMAPUR® ACS, Reag. Ph. Eur. analytical reagent	Plastic bottle for solids	500 g	27653.260
Sodium acetate ≥99.0%, AnalAR® NORMAPUR® ACS, Reag. Ph. Eur. analytical reagent	Plastic bottle for solids	1 kg	27653.292

SODIUM ACETATE TRIHYDRATE 99.5-101.0%, ANALAR® NORMAPUR® ACS, REAG. PH. EUR. ANALYTICAL REAGENT

Description	Pack type	Pk	Cat. No.
Sodium acetate trihydrate 99.5-101.0%, AnalAR® NORMAPUR® ACS, Reag. Ph. Eur. analytical reagent	Plastic bottle for solids	250 g	27652.232
Sodium acetate trihydrate 99.5-101.0%, AnalAR® NORMAPUR® ACS, Reag. Ph. Eur. analytical reagent	Plastic bottle for solids	500 g	27652.260
Sodium acetate trihydrate 99.5-101.0%, AnalAR® NORMAPUR® ACS, Reag. Ph. Eur. analytical reagent	Plastic bottle for solids	1 kg	27652.298
Sodium acetate trihydrate 99.5-101.0%, AnalAR® NORMAPUR® ACS, Reag. Ph. Eur. analytical reagent	Plastic bottle for solids	5 kg	27652.367

SDS (SODIUM DODECYL SULPHATE) ≥99%, ANALAR®NORMAPUR®ANALYTICAL REAGENT

A general biochemical reagent often used as a detergent for electrophoresis

Description	Pack type	Pk	Cat. No.
SDS (Sodium dodecyl sulphate) ≥99%, AnalAR® NORMAPUR®analytical reagent	Plastic bottle for solids	100 g	108073J



GEL DOCUMENTATION SYSTEM, VWR® BASIC

The VWR® Basic gel documentation system offers reproducible, high resolution digital images for gel documentation. This entry level system is easy to use and allows real time images to be captured and viewed directly on a PC or laptop (not supplied). The VWR® Basic system can be illuminated using transillumination from UV, white or blue light. These flexible lighting options make the VWR® Basic suitable for capturing and viewing images from a wide range of samples.

- High resolution digital camera with 18 MP resolution produces high quality images with precise band separation
- Full PC interface enables control of camera with real time imaging
- Programmable capture settings
- JPEG images can be saved onto a USB stick, hard drive or directly to a network by PC
- Powered by rechargeable battery (supplied)

Using the VWR® Basic system it is possible to produce images of electrophoresis gels stained with many fluorescent and colorimetric dyes, including: Coomassie® Blue, silver stain, ethidium bromide, SYBR® Gold SYBR® Green, SYBR® Safe, SYPRO® Red, SYPRO® Ruby, or Fluorescein. As new dyes are released we work to optimise their use with the VWR® Basic system, so please ask your local VWR contact for updates.

VWR® Basic is also suitable for viewing and capturing images from agar plates of dark, light, or two colour colonies, cells in flasks, autoradiographs, DNA, RNA or protein on membranes, spot and slot blots of DNA, RNA or protein, cells or solutions in microtitre plates and DNA or protein macroarrays.

Max. gel size with hood 200×200 mm

System is supplied with 18 MP camera, hood, UV filter and VWR® Gel Documentation Software. Illumination options must be ordered separately.

Resolution	18 megapixels
W×D×H	280×210×370 mm

Description	Pk	Cat. No.
VWR® Basic	1	730-1470

Description	Pk	Cat. No.
Transilluminators for use with VWR® Basic		
UV transilluminator (200×200 mm, 302 nm)	1	730-1464
UV transilluminator (200×200 mm, 365 nm)	1	730-1465
UV transilluminator (200×200 mm, 254 nm)	1	730-1466
Blue light LED transilluminators, VWR® Blue		
VWR® Blue transilluminator (200×160 mm, 470 nm)	1	730-1467
Accessories		
UV to white light converter screen, 200×200 mm	1	730-1395



Gel documentation system, SMART5

GEL DOCUMENTATION SYSTEM, VWR® SMART5

VWR® SMART5 is a new generation, low cost, integrated imaging system for DNA and protein analysis also gel documentation.

- Compact workstation
- Complete with built-in processor, touch screen and SMART5 software
- Motor-driven zoom lens
- 5 MP pixel camera
- White, UV and blue lighting options
- Complete networking connectivity (optional)

SMART5 is the ultimate in compact gel documentation workstations. Using a choice of UV, blue or white lighting options, you can capture and edit images of fluorescent ethidium bromide, SYBR® Safe or GelGreen™ DNA gels and protein gels stained with Coomassie Blue at the workstation.

For an entry level system, the SMART5 comes with a ground breaking 5 million pixel CCD camera giving superb pixel resolution and unrivalled sensitivity. SMART5 offers a maximum viewing area of 20×24 cm which is very large for such a small, compact unit.

Complete system includes 5 MP camera with motor-driven zoom lens f1.2; epi white light for sample positioning; UV032 filter; image capture and GeneTools analysis software. Transilluminator and converter screens not supplied (available separately).

Model	SMART5	
Camera	5 MP, 12/16 bit CCD	
Display	7" (17,8 cm) touchscreen	
Dynamic range	3,6/4,8 (extended)	
Filters	UV032	
Image area (mm)	200×240	
Lens	8 - 48 mm f/1.2	
Software	GeneTools analysis	
Weight	20 kg	
W×D×H	310×450×750 mm	

Description	Pk	Cat. No.
Gel Documentation System	1	730-0496

Description	Pk	Cat. No.
Transilluminators for use with VWR® Smart		
UV transilluminator (200×240 mm, 302 nm, 230 V, 50 Hz with runners)	1	730-0497
Accessories		
Networking kit	1	730-0525
UV to white light converter screen, 200×200 mm	1	730-1395
UV to blue light conversion screen 210×260 mm	1	730-1493
Thermal printer, digital	1	730-1260



GEL DOCUMENTATION SYSTEMS, VWR® IMAGER2 AND IMAGER CHEMI PREMIUM

VWR® Imager gel documentation and analysis systems are available in configurations suitable for fluorescence and chemiluminescence applications. Both models are fitted with a digital CCD camera (3,8 or 4 MP) which utilises the latest USB technology. The standard system features a 12-bit CCD camera that can be software modified to 16-bit. The CHEMI Premium system is equipped with a true 16-bit advanced cooled CCD camera able to capture images of a wide range of chemiluminescent samples using common substrates.

- Modular system can be tailored to meet specific user requirements
- Automated PC control speeds up image capture and the analysis process
- 16-bit performance for very accurate gel data
- Auto-locking door protects against accidental UV exposure, and large door opening provides easy access for gel positioning and viewing
- Motor-driven optics and lighting options for easy system set-up and flexible imaging applications

These systems are computer controlled, with motor-driven lenses as standard in both systems (with feedback data on CHEMI Premium). The darkroom, is completely light-tight and

suitable for RGB and advanced chemiluminescent applications, has a robust, wide opening hinged door for easy access to the chamber, and electronic auto-door lock with security function to prevent interruption during long exposures. Functions such as camera settings, lens control (including feedback data on CHEMI Premium), filter selection and lighting can all be set up from a PC (not supplied). In addition, user functions such as camera exposure, neutral fielding and extended dynamic range can also be selected from the desktop. All these settings can be saved on one button in the user-defined configurations.

VWR® Imager systems incorporate advanced image capture software specifically developed to simplify the process of capturing gel images. VWR® Gel Documentation Image Capture Software is a fully automatic package that controls camera integration, exposure, lens and capture options with auto-focus configuration for precise focusing. VWR® Gel Documentation Software is an advanced, automated, analysis software that can rapidly analyse a gel from loading to output of results in a matter of seconds. Requiring minimal user training, VWR® Gel Documentation Software is able to handle a wide range of media including gels, plates, films and spot blots.

Using the VWR® Imager systems it is possible to produce images of electrophoresis gels stained with many fluorescent and colorimetric dyes, including: Coomassie® Blue, silver stain, ethidium bromide, SYBR® Gold, SYBR® Green, SYBR® Safe, GelStar®, SYPRO® Red, SYPRO® Ruby, SYPRO® Orange, Fluorescein, Rhodamine Red™, Texas Red™, Pro-Q® Diamond, Deep Purple™ or GFP plates. In addition, the VWR Imager CHEMI Premium also offers imaging using chemiluminescence, bioluminescence, stain-free gels, Alexafluor dyes, CFTM Dyes, and Cy® dyes. As new dyes are released we work to optimise their use with the VWR® Imager systems, so please ask your local VWR contact for updates.

The standard system includes a 3,8 MP 12-bit digital CCD camera (16-bit file depth), motorised zoom lens, and 7-position filter wheel. The CHEMI Premium system includes a 4 MP 16-bit cooled digital CCD camera, motorised zoom lens with feedback, and 7-position motor-driven filter wheel. All systems include a cabinet, white epi-light (overhead), VWR® Gel Documentation Software and VWR® Gel Documentation Image Capture Software, cables and support software pack. Illumination options must be ordered separately.

WxDxH	570x450x840 mm
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Description	Pk	Cat. No.
VWR® Imager 2	1	730-1458
VWR® Imager CHEMI Premium	1	730-1469

Description	Pk	Cat. No.
Blue light LED transilluminators, VWR® Blue		
VWR® Blue transilluminator (200x160 mm, 470 nm)	1	730-1467
Transilluminators for use with VWR® Imager2 and CHEMI Premium		
UV transilluminator (200x200 mm, 365 nm)	1	730-1472
UV transilluminator (250x300 mm, 365 nm)	1	730-1473
UV transilluminator (200x200 mm, 302/365 nm)	1	730-1474
UV transilluminator (250x300 mm, 302/365 nm)	1	730-1475
UV transilluminator (200x200 mm, 254 nm)	1	730-1476
UV transilluminator (250x300 mm, 254 nm)	1	730-1477
UV transilluminator (200x200 mm, 254/365 nm)	1	730-1478
UV transilluminator (250x300 mm, 254/365 nm)	1	730-1479
UV transilluminator (200x200 mm, 254/302 nm)	1	730-1480
UV transilluminator (250x300 mm, 254/302 nm)	1	730-1481
UV transilluminator (200x200 mm, 302 nm)	1	730-1482
UV transilluminator (250x300 mm, 302 nm)	1	730-1483

Description	Pk	Cat. No.
Accessories		
UV to white light converter screen, 305x330 mm	1	730-1396
Epi-LED module, blue (peak 465 nm), CHEMI systems only	2	733-2369
Epi-LED module, blue (peak 465 nm), specially for multiplexing, CHEMI systems only	2	733-2314
UV to blue light conversion screen 210x260 mm	1	730-1493
Epi-LED module, green (peak 520 nm), CHEMI systems only	2	733-2370
UV to blue light conversion screen 250x300 mm	1	730-1494
Epi-LED module, green (peak 520 nm), specially for multiplexing, CHEMI systems only	2	733-2315
Epi-LED module, near IR (peak 740 nm), specially for multiplexing, CHEMI systems only	2	733-2316
White light pad, fold down, with brackets, 200x140 mm	1	730-1391
Epi UV module, with 2x365 nm tubes	1	730-1392
Epi-LED module, red (peak 635 nm), CHEMI systems only	2	733-2371
Epi UV module, with 2x302 nm tubes	2	733-2615
Epi-LED module, red (peak 635 nm), specially for multiplexing, CHEMI systems only	2	733-2372
Epi UV module, with 2x254 nm tubes	1	730-1394
Thermal printer, digital	1	730-1260
Thermal paper, matt	1 Roll	730-2892
Thermal paper, glossy	1 Roll	733-2000



CHEMILUMINESCENCE IMAGING SYSTEM, VWR® CHEMI ONLY

The VWR® CHEMI only system is dedicated to chemiluminescence imaging. The system is built for high performance automation and features a next generation, high quantum efficiency CCD camera for even greater sensitivity. A very simple set-up process means a single click will automatically capture a quality image of any Western blot.

- Configured for maximum sensitivity to ensure even the faintest band on a blot can be captured
- High quantum efficiency camera (73% @ 425 nm) is very sensitive to low level light emissions
- Small footprint - takes up minimal bench space

Each system is supplied complete with 4 MP 12-/16-bit CCD camera, VWR® Image Capture Software and two copies VWR® Gel Documentation Analysis Software.

Lens	Fixed f0,95
WxDxH	370x470x460 mm

Description	Pk	Cat. No.
VWR® CHEMI only	1	730-1471



VWR® TRANSILLUMINATORS

All VWR® transilluminators slide out for easy access to provide very even illumination. Those for use with the VWR® Imager system also have variable intensity settings.

- Choice of filter sizes
- Safety cut-off (when in darkroom)
- Choice of different/multiple wavelengths available

Description	Dimensions (mm)	Pk	Cat. No.
Transilluminators for use with VWR® Imager2 and CHEMI Premium			
UV transilluminator (200x200 mm, 365 nm)	335x310x100	1	730-1472
UV transilluminator (250x300 mm, 365 nm)	335x310x100	1	730-1473
UV transilluminator (200x200 mm, 302/365 nm)	335x310x100	1	730-1474
UV transilluminator (250x300 mm, 302/365 nm)	335x310x100	1	730-1475
UV transilluminator (200x200 mm, 254 nm)	335x310x100	1	730-1476
UV transilluminator (250x300 mm, 254 nm)	335x310x100	1	730-1477
UV transilluminator (200x200 mm, 254/365 nm)	335x310x100	1	730-1478
UV transilluminator (250x300 mm, 254/365 nm)	335x310x100	1	730-1479
UV transilluminator (200x200 mm, 254/302 nm)	335x310x100	1	730-1480
UV transilluminator (250x300 mm, 254/302 nm)	335x310x100	1	730-1481
UV transilluminator (200x200 mm, 302 nm)	335x310x100	1	730-1482
UV transilluminator (250x300 mm, 302 nm)	335x310x100	1	730-1483
Transilluminators for use with VWR® Smart			
UV transilluminator (200x240 mm, 302 nm, 230 V, 50 Hz with runners)	310x450x750	1	730-0497
UV transilluminator (200x200 mm, 302 nm)	241x315x80	1	730-1461
UV transilluminator (200x200 mm, 365 nm)	241x315x80	1	730-1462
UV transilluminator (200x200 mm, 254 nm)	241x315x80	1	730-1463
Transilluminators for use with VWR® Basic			
UV transilluminator (200x200 mm, 302 nm)	241x315x80	1	730-1464
UV transilluminator (200x200 mm, 365 nm)	241x315x80	1	730-1465
UV transilluminator (200x200 mm, 254 nm)	241x315x80	1	730-1466



730-1467



730-1468

BLUE LIGHT LED TRANSILLUMINATORS, VWR® BLUE

Blue light transilluminators are often used as an alternative to UV transilluminators when users wish to use 'safe dyes' instead of ethidium bromide. A blue light transilluminator is a 'safe' light source, in that the user is not exposed to harmful UV radiation, and samples are free from photonicking.

Description	Pk	Cat. No.
VWR® Blue transilluminator (200x160 mm, 470 nm)	1	730-1467
VWR® Blue slim transilluminator (100x120 mm, 470 nm)	1	730-1468



111-1841

GOGGLES, KINGSTON

Wrap-around modern style goggles, especially designed for small faces, provides excellent panoramic vision. The goggles consist of a PC lens, PVC frame and polyester/rubber headband.

- High comfort with maximum protection
- Fitted with indirect ventilation
- Opalescent frame prevents light reflection

2016/425/EU, EN 166:2001, ISO 9001:2008; EN 166 3 4 BT CE (frame); 1 BT 0 (lens)

Type	Lenses	Colour	Pk	Cat. No.
Anti-UV, anti-scratch, anti-fog	Clear PC	Translucent blue	1	111-1841



111-1845

SAFETY SPECTACLES, LONDON

Stylish protective eyewear combining fashion, fit and function.

- Moulded-in nose bridge
- Soft, non slip rubber temple tips
- Ideal for small facial contours

2016/425/EU, EN 166:2001, EN 170, ISO 9001:2008; 166 FT CE (frame) 1 FT (lens)

Type	Lenses	Colour	Pk	Cat. No.
Anti-UV (2-1,2), anti-scratch, anti-fog	Clear PC	Light blue	1	111-1845



CAPILLARY TIPS FOR GEL LOADING

Non bevelled capillary section, non graduated, compatibility type H.

- Thin capillary fits between gel plates
- Accurately fills the wells between the teeth of the gel comb
- Wide sealing areas to also fit older pipette barrels
- Virgin resins and sustainable product design

Environmentally preferable attribute	Low Manufacturing Impact, Sustainable Packaging
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Volume (µl)	Sterile	Length (mm)	Packed	Pk	Cat. No.
1 - 200	-	30	Bulk	1.000	613-0257
1 - 200	-	30	6 racks, 96 each	576	732-0508
1 - 200	+	30	6 racks, 96 each	576	732-0509

REFRIGERATED CIRCULATORS

Stainless steel circulating baths with choice of Advanced Programmable or Advanced Digital temperature controller. Both are easy to navigate with large, intuitive displays and multiple communication options, including USB-A and B, RS232/485, Ethernet and external temperature probe. The reservoir drain can be accessed by removing the front panel. All models feature user-adjustable, high temperature safety cut-off points, as well as over-temperature protection. The surface is cool to the touch, even when operating at high temperatures.

- Working temperatures from –40 to +200 °C with stability of ±0,01 °C (except 45 litre models with maximum 135 °C)
- Variable speed pressure/suction pump with external circulation and temperature control capability
- 180° rotating controllers, lid stowing system, chemically resistant deck and environmental control system reduces noise, increases refrigeration efficiency, and lowers energy consumption
- Cooling technology regulates the amount of cooling required, saving energy while providing rapid cooling and precise control at elevated temperatures
- Event scheduling (time and date), real time clock and temperature trends for up to 10 days with Programmable models
- Selectable home screens and on-screen help
- Automatic and/or user-adjustable performance optimisation

Advanced Digital models feature an intuitive 9,5 cm display with touch pad control, single-point calibration, menus and prompts in 4 languages: French, German, Spanish and English.

Advanced Programmable models have an intuitive 10,9 cm display, 5-point calibration capability, menus and prompts in 6 languages: French, German, Spanish, English, Chinese and Arabic, plus time/temperature programming (10×100-step programs).

- Comply with DIN 12876-1, Safety Class III
- Maximum pump capacities:
- 16,7 l/min, 250 mbar, 12,2 l/min suction
- Supplied with a reservoir cover, bypass tubing, male inlet and outlet adapters for 47, 63 and 95 mm tubing, ¼" to M16 adapters are also included. For probes and accessories, please visit vwr.com or contact your local VWR sales office.
- Cooling capacity at 20 °C

Type	Temp. range (°C)	Temp. stability (°C)	Heating capacity (kW)	Cooling capacity (kW)	Capacity (l)	Bath W×D×H (mm)	W×D×H (mm)	Pk	Cat. No.
Models with Advanced Digital temperature controller									
AD7LR-20	–20...+200	±0,01	2,2	0,2	7	142×157×127	411×589×411	1	462-0224
Models with Advanced Programmable temperature controller									
AP07R-20	–20...+200	±0,01	2,2	0,2	7	142×157×127	221×541×617	1	462-0227

COMPLEMENTARY PRODUCTS



ROCKING PLATFORM SHAKERS

Rocking platform shakers have variable speed and adjustable tilt to provide optimum control of mixing conditions, a gentle wave motion is ideal for blotting membranes and gels. Shakers maintain constant speed regardless of load or voltage fluctuations. Durable shakers with choice of models with single- or double-tiered stainless steel platforms.

- Continuous or timer operation from 1 to 120 min, with automatic switch off
- Model with double platform increases sample capacity when bench space is limited
- Can be used at 4 to 65 °C (80% relative humidity, non condensing), in an incubator or cold room

IP protection class according to DIN EN 60529: IP 54

Supplied with non slip rubber mat.

Model	Single tier	Double tier
Angle (°)		±20
Input power (W)		24
Max. load (kg)		5
Platform WxD (mm)		356x280
Shaking motion		Rocking
Speed (min ⁻¹)		6 - 120
Weight (kg)	6,9	8,0
WxDxH (mm)	355x352x160	355x352x250

Description	Pk	Cat. No.
Rocking platform shaker, single tier, EU-plug	1	444-0142
Rocking platform shaker, single tier, UK-plug	1	444-0143
Rocking platform shaker, single tier, CH-plug	1	444-0144
Rocking platform shaker, double tier, EU-plug	1	444-0145
Rocking platform shaker, double tier, UK-plug	1	444-0146
Rocking platform shaker, double tier, CH-plug	1	444-0147



MINI BLOT, 3-D SHAKER

The Mini blot shaker combines the actions of a rocker and a shaker to produce a three-dimensional motion that is gentle enough for fragile gels and blots, yet provides thorough mixing.

- Gyrotory action for gentle, efficient staining
- Optimal pitch and speed for processing Western blots
- Can be used in an incubator or cold room

Designed for processing blots and staining applications, the pitch and speed of the shaker are optimally set to allow for use of a minimal amount of solution while preventing the membrane or gel from drying out. Using a smaller amount of reagents helps to conserve valuable probes and antibodies.

Supplied with a non slip rubber mat and two large blot boxes. Two sizes are available to hold blots of 8x10 and 10x10 cm gels. The larger boxes will accommodate gels from VWR's modular Mini vertical PAGE systems.

Model	Mini blot shaker
Angle (°)	Fixed 5
Max. load (kg)	0,8
Operating temperature range (°C)	Ambient +4...65
Platform WxD (mm)	200x165
Shaking motion	3-D
Speed (min ⁻¹)	Fixed 20
Weight (kg)	0,88
WxDxH (mm)	240x171x150

Description	Pk	Cat. No.
Mini blot shaker, EU-plug	1	700-0245
Mini blot shaker, UK-plug	1	700-0246
Mini blot shaker, CH-plug	1	700-0247

Avantor Services

Equipment Services

Our equipment services optimise your uptime, ensuring your equipment is fully compliant and performing to specifications. We offer:

- Multi-vendor technical services
 - Installation
 - Repairs
 - Relocation
 - Calibration
 - Validation
 - Preventive maintenance
 - Warranty
- Asset management

PB19033-EN

COMPLEMENTARY PRODUCTS



ROCKING PLATFORM SHAKER

Rocking platform shaker with low profile design, can be used in most fume hoods and incubators. The cast aluminium base offers durability and stability, the spill resistant design channels fluids away from internal components. Precise speed control provides smooth, low speed rocking motion down to 1 min⁻¹.

- Microprocessor control provides electronic tilt angle adjustment from 0 to 15° while unit is operating
- LED display shows speed, tilt angle and time simultaneously
- Timer from 1 s to 160 h, with audible alarm when the time reaches zero
- Can be used at -10 to +60 °C (max. 80% relative humidity, non condensing) in cold rooms, incubators and CO₂ environments

Touch pad controls with easy to read LED display. Provides repeatable and accurate results every time and is easily visible across lab benches. Timer displays elapsed time or, when programmed to user-defined limit, will shut off unit when time reaches zero. Display will show last used settings, even after power has been turned off. Overload protection via audible and visual signals activated when system detects an obstruction or tray overload. Speed ramping feature slowly increases speed to desired set point to avoid splashing. Unit is ideal for cell culture work, staining and destaining gels, hybridisation procedures, haematology and blotting techniques.

Supplied with a 324×254 mm non slip rubber mat. Stacking tray must be ordered separately.

* Note: Maximum speed/tilt angle may vary with heavy or unbalanced loads.

** Centred on tray.

Model	Rocking platform shaker
Angle (°)	0 - 15°
Max. load (kg)	4,5**
Platform W×D (mm)	254×324
Shaking motion	Rocking
Speed range (min ⁻¹)	1 - 50*
Weight (kg)	6,5
W×D×H (mm)	279×432×127

Description	Pk	Cat. No.
Rocking platform shaker, CH-plug	1	444-0758
Rocking platform shaker, EU-plug	1	444-0756

Description	For	Pk	Cat. No.
Accessories			
Spare dimpled mat to prevent tubes from rolling around	Rocking platform shaker	1	444-0768
Stacking tray	Rocking platform shaker	1	444-0772



BENCH PROTECTORS

High quality, smooth, absorbent paper that quickly absorbs liquid spills with a thick, laminated polyethylene layer that prevents seeping onto the work surface.

- Retains leaked reagents in radiochemical laboratories preventing radioactive contamination
- Enables recovery of expensive leaked materials
- Breakage protection for hard surfaces
- Absorption layer for removing water or solvent from desiccant chambers
- Impermeable protective material for lining animal cages

Absorbance rate: 115-9220 and 115-9221: 500 ml/m²

Absorbance rate: 115-0673: 750 ml/m²

Colour	L×W (mm)	Packed	Pk	Cat. No.
White	460×570	Single sheets	50	115-9220
White	460×50 000	Roll	1	115-9221
White	460×570	Single sheets	50	115-0673



LAB MAT, SILICONE

The reusable, environmentally friendly lab mat is an economical solution to help keep bench tops clean and safe from stains, spills and wear. The Lab Mat is made from a durable FDA-approved silicone material that creates a stain resistant, washable working surface. It is chemically inert and does not react with most chemicals.

- Protect bench tops from hot items up to +200 °C
- Large anti-skid and noise-dampening working surface
- Lip design around the outer edge of the mat helps contain spillage
- Can be cleaned with standard disinfectants in a sink or dishwasher, allowing repeated use
- Mat can be rolled up for compact storage
- Autoclavable at +121 °C for 15 minutes

Can be used with centrifuges, vortex mixers, hot plates, stirrers, pipettes. Ideal for every type of laboratory and more specialised areas, such as cold rooms, cleanrooms, sterile suites and areas where high sterility is a requirement.

Thickness (mm)	Colour	L×W (mm)	Pk	Cat. No.
2	Purple	350×600	1	111-9200



Green lab mat, silicone

WORKSTATION LAB MAT

These durable FDA food grade silicone lab mats are ideal for every type of laboratory and more specialised areas such as cold rooms, cleanrooms, sterile suites and areas where high sterility is a requirement. They safely facilitate workflow processes with organisation and easy clean up.

- Reversible - Side one: Combination gridded and smooth surface; Side two: Smooth surface only
- Keeps bench tops clean and safe from stains, spills and wear, protects against hot items up to +200 °C
- Lip around the edge can hold approx. 250 ml of liquid
- Anti-skid surface helps keep the mat and items in place
- Noise dampening, reducing sound from the vibration of common bench top equipment
- Chemically inert, does not react with most chemicals
- Autoclavable at +121 °C for 15 minutes

The gridded surface is ideal for tube staging, preventing movement of small objects and securing items such as reservoirs, pipette tip boxes, assay plates, etc.

These mats are reusable and thus reduce waste making it a more environmentally friendly option over disposable mats. They can be easily cleaned using any standard disinfectant by simply wiping it and are dishwasher safe.

The mats can be rolled up for compact storage.

Thickness (mm)	Colour	LxW (mm)	Pk	Cat. No.
2	Green	305x379	1	111-2431

IgGy Antibody Selector

Search. Select. Simple.

The IgGy Antibody Selector makes searching for antibodies easier.

VWR, part of Avantor has brought together a multitude of antibody suppliers and manufacturers with hundreds of thousands of antibodies to meet your specific application needs.

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<https://vwr.com/antibody>



Setting science in motion to create a better world



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