

# VWR<sup>®</sup> for nucleic acid preparation

01. SAMPLE DISRUPTION  
& HOMOGENISATION

02. NUCLEIC ACID  
ISOLATION

03. PHOTOMETRY

04. CENTRIFUGATION &  
STORAGE



# VWR® for nucleic acid preparation

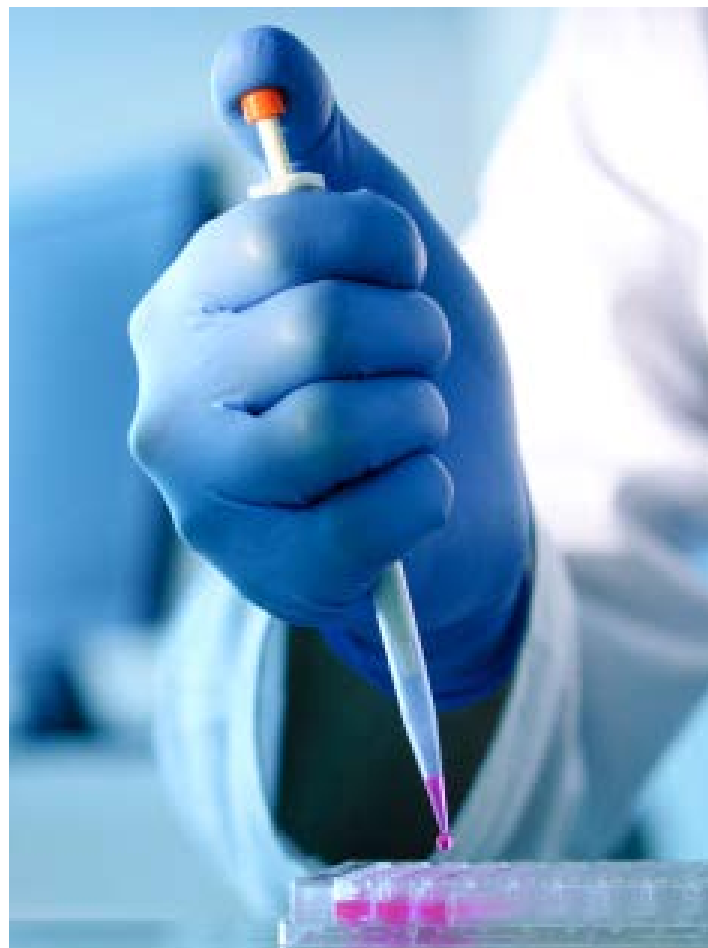
## Welcome to the VWR branded range of products for nucleic acid preparation

No doubt quality and quantity of nucleic acids extracted from your samples is key for your success in many downstream applications like expression profiling, genotyping, sequencing or cloning. We, therefore, understand that you will not take decisions lightly, and carefully select reliable solutions from a partner you can trust. Being a well-known solution provider to labs around the globe, we want to make sure you are aware of our range of products for nucleic acid preparation that have proved they deserve to carry the VWR logo.

Starting with sample disruption and homogenisation, this catalogue features bead beaters which will maximise yields and reproducibility, while minimising time and effort spent, as well as any risk of cross contamination. The second chapter provides access to a broad spectrum of very effective reagents and kits for the purification of RNA, genomic DNA, plasmid DNA or PCR products. For determining concentration and purity of nucleic acids, a selection of VWR photometers can be found in the 3rd chapter before the workflow is completed by products for centrifugation and storage.

Most of our products are available for lab demonstration, trials or samples to make sure you're happy with your decision before you order. Just get in touch with us!

Your VWR Life Science Team



# 01

## SAMPLE DISRUPTION & HOMOGENISATION

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VWR® 4-PLACE MINI BEAD MILL HOMOGENIZER

The VWR® 4-Place Mini Bead Mill Homogenizer is a compact and powerful bead mill homogenizer.

- Specifically designed for grinding, lysing, and the homogenization of biological samples prior to molecular extraction
- Ideal solution for releasing DNA, RNA, proteins, and enzymes from tough samples while still retaining molecular integrity
- Offers a broad performance range

Using sample tubes pre-filled with a variety of lysing beads, the mill vigorously and uniformly shakes the tubes providing an efficient, consistent, high-yield and quality homogenization in less than 60 seconds. The VWR® 4-Place Mini Bead Mill supports simultaneous processing of samples in 4 x 0.5 mL, 4 x 1.5 mL, 4 x 2 mL, or 1 x 7 mL tubes. It does not require a cool down period between runs, allowing for non-stop use and high throughput. The unit features a convenient front loading design and safety lid closure.

**Ordering information:** Includes the VWR® Mini Bead Mill Drive Unit, integrated 0.5 mL, 1.5 mL and 2 mL tube carriage, interchangeable 1 x 7 mL tube carriage, user manual, and two-year warranty. VWR® disposable bead tubes are sold separately.

| Description                             | Cat. No. |
|-----------------------------------------|----------|
| VWR® MINI BEAD MILL 4 HOMOGENIZER, 230V | 432-0366 |

| Description                                  | Cat. No. |
|----------------------------------------------|----------|
| 1.5ML HARD TISSUE GRINDING MIX, 50 PACK      | 432-0368 |
| 1.5ML SOFT TISSUE HOMOGENIZING MIX, 50 PACK  | 432-0369 |
| 1.5ML HARD TISSUE HOMOGENIZING MIX, 50 PACK  | 432-0370 |
| 2ML TOUGH MICRO ORGANISM LYSING MIX, 50 PACK | 432-0371 |
| 2ML SOFT TISSUE HOMOGENIZING MIX, 50 PACK    | 432-0372 |
| 2ML HARD TISSUE HOMOGENIZING MIX, 50 PACK    | 432-0373 |
| 2ML HARD TISSUE GRINDING MIX, 50 PACK        | 432-0374 |
| 0.5ML SOFT TISSUE HOMOGENIZING MIX, 50 PACK  | 432-0375 |



VWR® BEAD MILL HOMOGENIZER

The VWR® Bead Mill is part of the newest generation of bead mill homogenizers. This economical system is specifically designed for grinding, lysing and homogenization of up to 16 samples. Using sample tubes pre-filled with a variety of lysing beads, the VWR Bead Mill vigorously and uniformly shakes the tubes providing an efficient, consistent, high-yield and quality homogenization usually in less than 40 seconds.

- 16 sample capacity  
(12 x 2 ml tubes and 4 x 7 ml tubes, 16 in total)
- Run time 1 second to 10 minutes
- 0.8 to 6 m/s
- Up to 99 programs

The VWR® Bead Mill simultaneously homogenizes 12 x 0.5mL, 4 x 1.5mL, 12 x 2mL, or 4 x 7mL samples

The VWR® Bead Mill is an ideal solution for releasing DNA, RNA and proteins from tough samples.

It does not require a cool down between runs which allows for non-stop use and high throughput. The unit features a convenient front loading design with snap in tube carriage.

**Ordering information:** Includes the Bead Mill Drive Unit, Tube Carriage, User Manual, and a two-year warranty.

| Description                      | Cat. No. |
|----------------------------------|----------|
| VWR® BEAD MILL HOMOGENIZER, 230V | 432-0367 |



## VWR® BEAD MILL MAX

The VWR® Bead Mill MAX is the premier model of the VWR® Bead Mill Homogenizer line. The VWR® Bead Mill MAX is designed to grind, lyse or homogenize the most difficult samples with repeatable results. Using sample tubes, pre-filled with a variety of bead media, the VWR® Bead Mill MAX vigorously and uniformly shakes the tubes providing an efficient, consistent, high yield and quality homogenate usually in less than 30 seconds. The unique tube carriage motion ensures that the intra-tube bead movement reduces swirling and creates the highest bead impact force of any bead mill on the market.

- Process in tubes ranging from - 24 x 0.5 mL, 24 x 1.5 mL, 24 x 2 mL, 12 x 7 mL, or 6 x 30 mL

- Optional cryo cooling unit can be ordered separately for preventing increase of sample temperature during homogenization (requires compressed air, liquid nitrogen or dry ice in ethanol).
- User friendly, multilingual touch screen interface
- No cool down required between runs: process hundreds of sample per day
- Unlimited programmable memory settings for storing protocols
- Convenient front loading design features an integrated lid lock that engages during operation
- Ideal for sample preparation when extracting DNA, RNA, proteins and small molecules
- Includes 2 mL tube carriage.

## Specifications

|                     |                        |       |
|---------------------|------------------------|-------|
| Run Time            | 1 second to 10 minutes |       |
| Electrical          | 120VAC / 230 V         |       |
| Sample Volume Range | 0.5 mL                 | 30 mL |
| No. of cycles       | 1-10                   |       |
| Weight              | 29.5 kg (65 lbs)       |       |
| Performance         | 0. to 6.5 m/s          |       |
| Dimensions          | 30.5 x 43.2 x 36.8 cm  |       |

| Description                         | Cat. No. |
|-------------------------------------|----------|
| VWR® BEAD MILL MAX HOMOGENIZER 230V | 432-0380 |

| Description                                               | Cat. No. |
|-----------------------------------------------------------|----------|
| CRYO COOLING UNIT, COMPATIBLE WITH THE BEAD MILL MAX      | 432-0394 |
| 7ML TUBE CARRIAGE KIT, COMPATIBLE WITH THE BEAD MILL MAX  | 432-0395 |
| 30ML TUBE CARRIAGE KIT, COMPATIBLE WITH THE BEAD MILL MAX | 432-0396 |
| 1.5ML HARD TISSUE GRINDING MIX, 50 PACK                   | 432-0368 |
| 1.5ML SOFT TISSUE HOMOGENIZING MIX, 50 PACK               | 432-0369 |
| 1.5ML HARD TISSUE HOMOGENIZING MIX, 50 PACK               | 432-0370 |
| 2ML TOUGH MICRO ORGANISM LYSING MIX, 50 PACK              | 432-0371 |
| 2ML SOFT TISSUE HOMOGENIZING MIX, 50 PACK                 | 432-0372 |
| 2ML HARD TISSUE HOMOGENIZING MIX, 50 PACK                 | 432-0373 |

| Description                                 | Cat. No. |
|---------------------------------------------|----------|
| 2ML HARD TISSUE GRINDING MIX, 50 PACK       | 432-0374 |
| 0.5ML SOFT TISSUE HOMOGENIZING MIX, 50 PACK | 432-0375 |
| 7ML HARD TISSUE GRINDING MIX, 50 PACK       | 432-0397 |
| 7ML SOFT TISSUE HOMOGENIZING MIX, 50 PACK   | 432-0398 |
| 7ML HARD TISSUE HOMOGENIZING MIX, 50 PACK   | 432-0399 |
| 30ML HARD TISSUE GRINDING MIX, 50 PACK      | 432-0402 |
| 30ML SOFT TISSUE HOMOGENIZING MIX, 50 PACK  | 432-0403 |
| 30ML HARD TISSUE HOMOGENIZING MIX, 50 PACK  | 432-0404 |



### MIXER MILL, BEATER

A ball mill for disintegration of small sample volumes that can also be used to shake/mix microtubes and microplates. Wide range of applications in different scientific fields from geology to biotechnology.

- Easy to use—simple knob and keypad to control frequency and timer
- Easy to maintain—brushless DC motor
- Large range of grinding jars and tube holders to suit the sample requirements

|                             |               |
|-----------------------------|---------------|
| Model                       | Beater        |
| Max. sample volume (ml)     | 2×50          |
| Vibrational frequency (Hz)  | 3 - 30        |
| Speed display               | LED           |
| Grinding time setting (min) | 5 s to 60 min |
| Power consumption (W)       | 200 VA        |
| W×D×H (mm)                  | 365×405×225   |
| Weight (kg)                 | 42            |

| Description | Pk | Cat. No. |
|-------------|----|----------|
| Beater      | 1  | 412-0167 |

### DEEP WELL PLATES, 96 SQUARE WELL

These 96 deep square well plates, made from virgin PP, are designed to make the interchanging of plates simpler in automated systems. They are also ideal for housing both cell and bacterial culture.

- Chemical resistant
- Free from DNase and RNase
- V-bottom well shape maximises liquid removal and aids resuspension
- No inner edges to interfere with magnetic bead collection
- Raised well rims to improve heat sealing
- Conical base aids sample concentration, reconstitution and centrifugation

Can be autoclaved once, but only if not used with robotic systems.



| Material                                                                                          | Sample volume (ml) | Max. feed size (mm) | Pk    | Cat. No. |
|---------------------------------------------------------------------------------------------------|--------------------|---------------------|-------|----------|
| <b>Grinding jars</b>                                                                              |                    |                     |       |          |
| Stainless steel                                                                                   | 0,5                | 1                   | 2     | 412-0168 |
| Stainless steel                                                                                   | 2                  | 2                   | 2     | 412-0169 |
| Stainless steel                                                                                   | 4                  | 4                   | 2     | 412-0170 |
| Stainless steel                                                                                   | 10                 | 6                   | 2     | 412-0171 |
| Stainless steel                                                                                   | 15                 | 6                   | 2     | 412-0172 |
| Stainless steel                                                                                   | 20                 | 8                   | 2     | 412-0173 |
| Steel, hardened                                                                                   | 0,5                | 1                   | 2     | 412-0174 |
| Steel, hardened                                                                                   | 2                  | 2                   | 2     | 412-0175 |
| Steel, hardened                                                                                   | 4                  | 4                   | 2     | 412-0176 |
| Steel, hardened                                                                                   | 10                 | 6                   | 2     | 412-0177 |
| Steel, hardened                                                                                   | 15                 | 6                   | 2     | 412-0178 |
| Steel, hardened                                                                                   | 20                 | 8                   | 2     | 412-0179 |
| PTFE                                                                                              | 20                 | 8                   | 2     | 412-0260 |
| Tungsten carbide                                                                                  | 10                 | 6                   | 2     | 412-0261 |
| Stainless steel, forensic applications                                                            | 10                 | 6                   | 2     | 412-0264 |
| <b>Grinding balls</b>                                                                             |                    |                     |       |          |
| Stainless steel                                                                                   | 3                  |                     | 20    | 412-0201 |
| Hardened steel                                                                                    | 3                  |                     | 20    | 412-0266 |
| Tungsten carbide                                                                                  | 3                  |                     | 20    | 412-0268 |
| Stainless steel                                                                                   | 5                  |                     | 20    | 412-0190 |
| Tungsten carbide                                                                                  | 5                  |                     | 20    | 412-0269 |
| Hardened steel                                                                                    | 5                  |                     | 20    | 412-0273 |
| Stainless steel                                                                                   | 7                  |                     | 20    | 412-0202 |
| Hardened steel                                                                                    | 7                  |                     | 20    | 412-0267 |
| Tungsten carbide                                                                                  | 7                  |                     | 20    | 412-0270 |
| Agate                                                                                             | 10                 |                     | 10    | 412-0262 |
| Hardened steel                                                                                    | 10                 |                     | 10    | 412-0274 |
| Stainless steel                                                                                   | 10                 |                     | 10    | 412-0277 |
| Hardened steel                                                                                    | 12                 |                     | 10    | 412-0275 |
| Stainless steel                                                                                   | 12                 |                     | 10    | 412-0278 |
| Stainless steel                                                                                   | 20                 |                     | 5     | 412-0265 |
| Tungsten carbide                                                                                  | 20                 |                     | 5     | 412-0271 |
| Stainless steel                                                                                   | 25                 |                     | 5     | 412-0193 |
| Hardened steel                                                                                    | 25                 |                     | 5     | 412-0276 |
| <b>Accessories</b>                                                                                |                    |                     |       |          |
| Tube holder, PTFE for reaction vials, 12×0,2 ml tubes on each arm                                 |                    |                     | 1     | 412-0181 |
| Tube holder, PTFE for reaction vials, 12×2 ml tubes on each arm                                   |                    |                     | 2     | 412-0182 |
| Tube holder, PTFE for reaction vials, 6×2 ml tubes on each arm                                    |                    |                     | 2     | 412-0183 |
| Tube holder, PTFE for reaction vials, 6×2 ml tubes (screw cap) on each arm                        |                    |                     | 2     | 412-0184 |
| Holder, PTFE, for up to 3 microplates or 1 deep well plates on each arm                           |                    |                     | 2     | 412-0185 |
| Rack, PTFE, for 24×1,5/2,0 ml tubes (with or without screw cap)                                   |                    |                     | 2     | 412-0199 |
| Dummy plate, PTFE, for replacing 1 microtitre plate in the rack                                   |                    |                     | 2     | 412-0200 |
| Rack, PTFE, 50 ml with 5 places for conical tubes                                                 |                    |                     | 2     | 412-0212 |
| Set of spanners                                                                                   |                    |                     | 1 SET | 412-0180 |
| Holder for 15 ml falcon tubes                                                                     |                    |                     | 2     | 412-0263 |
| Holder, stainless steel, for DNA kit, for 1 deep-well plate or 3 standard microplates on each arm |                    |                     | 2     | 412-0272 |

| Description                     | Colour | Sterile | Packed           | Well volume (ml) | Pk | Cat. No. |
|---------------------------------|--------|---------|------------------|------------------|----|----------|
| Deep well plate, 96 square well | Clear  | -       | 5 per inner pack | 2,0              | 50 | 732-3323 |
| Deep well plate, 96 square well | Clear  | +       | 5 per inner pack | 2,0              | 50 | 732-3325 |

| Description                  | Pk | Cat. No. |
|------------------------------|----|----------|
| <b>Accessories</b>           |    |          |
| Cap mat, 96 square well, EVA | 50 | 732-3333 |
| Cap mat, 96 square well, PP  | 50 | 732-3334 |



96-Well deep well microplates, clear

DEEP WELL PLATES, 96 SQUARE WELL,  
REINFORCED FOR GENOMICS APPLICATIONS

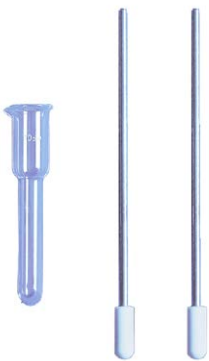
With reinforced walls to the bottom of the well backed with supporting ribs on the underside of the plate, these 2 ml square well PP blocks can be used safely and with confidence for plant DNA extraction. The wells have a total volume of 2,12 ml giving a generous working volume of 1,90 ml per well in a 45 mm high plate.

- Made from pure, virgin, extractable-free PP, rigorously tested for leachates
- Solid, stable and strong – able to withstand the applied forces in bead-beaters
- Manufactured to ANSI/SLAS specifications
- Free from DNase and RNase

Re-usable friction seals are available for these plates. The standard EVA cap mat is flexible and easy to apply. For those wishing to freeze the sealed plate at –80°C, a special PP cap mat is available. This forms a very tight seal and because it is made of the same polymer as the plate, it expands and shrinks at the same rate, thereby ensuring that the cap mat will not loosen as the temperature changes, preventing cross-contamination between wells. A special cap mat applicator is also available designed to reduce the risk of repetitive strain injuries whilst sealing large numbers of plates.

| Description                     | Colour | Sterile | Packed           | Well volume (ml) | Pk | Cat. No. |
|---------------------------------|--------|---------|------------------|------------------|----|----------|
| Deep well plate, 96 square well | Clear  | -       | 5 per inner pack | 2,0              | 50 | 732-3331 |
| Deep well plate, 96 square well | Clear  | +       | 5 per inner pack | 2,0              | 50 | 732-3332 |

| Description                  | Pk | Cat. No. |
|------------------------------|----|----------|
| Accessories                  |    |          |
| Cap mat, 96 square well, EVA | 50 | 732-3333 |
| Cap mat, 96 square well, PP  | 50 | 732-3334 |



TISSUE GRINDERS, POTTER-ELVEHJEM TYPE

Borosilicate glass tube, PTFE pestle with stainless steel shaft. Tissue grinders are used for controlled reduction of particle size and homogenisation of a variety of substances, especially biological material. The shearing forces generated by the movement of the rotating plunger in a precision bore tube cause size reduction, determining factors include clearance between the pestle head and tube, speed of rotation and viscosity of medium.

Grinding chamber clearance: 0.15–0.25 mm

Diameter of stainless steel shaft is 6.5 mm

| Capacity (ml)             | Ø ext.xlength (mm) | Total length (mm) | Pk | Cat. No. |
|---------------------------|--------------------|-------------------|----|----------|
| Glass vessel              |                    |                   |    |          |
| 2                         | 8x120              | 120               | 1  | 432-0200 |
| 5                         | 12x135             | 135               | 1  | 432-0201 |
| 10                        | 15x150             | 150               | 1  | 432-0202 |
| 15                        | 19x155             | 155               | 1  | 432-0203 |
| 30                        | 25x175             | 175               | 1  | 432-0204 |
| 50                        | 32x195             | 195               | 1  | 432-0205 |
| Plain plunger             |                    |                   |    |          |
| 2                         |                    | 230               | 1  | 432-0206 |
| 5                         |                    | 235               | 1  | 432-0207 |
| 10                        |                    | 270               | 1  | 432-0208 |
| 15                        |                    | 270               | 1  | 432-0209 |
| 30                        |                    | 270               | 1  | 432-0210 |
| 50                        |                    | 270               | 1  | 432-0211 |
| Plunger with serrated tip |                    |                   |    |          |
| 2                         |                    | 230               | 1  | 432-0212 |
| 5                         |                    | 235               | 1  | 432-0213 |
| 10                        |                    | 270               | 1  | 432-0214 |
| 15                        |                    | 270               | 1  | 432-0215 |
| 30                        |                    | 270               | 1  | 432-0216 |
| 50                        |                    | 270               | 1  | 432-0217 |





Tissue DNA kit, peqGOLD, 200 tests

DISPOSABLE PESTLES, MICROTUBES AND  
CORDLESS MOTOR FOR PELLET MIXING

Pestles and microtubes manufactured from polybutylene terephthalate (PBTP) in a Class 10 000, ISO Class 7, M5.5 cleanroom. Designed for homogenising cells and plant tissue or for re-suspending protein and DNA pellets. An optional battery-powered motor can be used with the pestles and microtubes. Pestles are 75 mm in length.

- Free from DNase, RNase and non pyrogenic
- Grooved grip makes pestle handle easy to turn without slipping, even when wearing gloves
- Lightweight motor reduces hand fatigue
- High speed vortexing action of the motor completely homogenises cell tissue or pellets within seconds

Pestles and microtubes are individually wrapped. Optional motor is supplied with a pestle adapter and two AA batteries.

| Description          | Capacity (ml) | Pk  | Cat. No. |
|----------------------|---------------|-----|----------|
| Pestle               | 0,5           | 100 | 431-0095 |
| Pestle               | 1,5           | 100 | 431-0094 |
| Microtube            | 0,5           | 100 | 431-0097 |
| Microtube            | 1,5           | 100 | 431-0096 |
| Pestle and microtube | 0,5           | 100 | 431-0099 |
| Pestle and microtube | 1,5           | 100 | 431-0098 |

| Description                | Pk | Cat. No. |
|----------------------------|----|----------|
| Accessories                |    |          |
| Pestle motor               | 1  | 431-0100 |
| Replacement pestle adapter | 1  | 431-0101 |

DNA ISOLATION, BLOOD AND TISSUE  
DNA MINI KITS, PEQGOLD

Fast, easy, and economical kit for isolation of DNA from a variety of samples including fresh or frozen cultured cells, tissue, blood, buccal swabs and saliva.

- No need for organic extractions
- No need for time-consuming alcohol precipitations
- Enzymatic degradation of cellular RNA
- Efficient separation of enzyme inhibitors and contaminants
- High yields due to strong lysis
- Fast, purification in less than 20 min (after lysis)

Typical starting amount should be 30 mg tissue, 5×10<sup>6</sup> cultured cells, or up to 250 µl. Gives purified DNA suitable for almost any downstream application.

Kit contains peqGOLD DNA Mini columns, 2 ml collection tubes, BL buffer, TL buffer, Proteinase K solution, HBC buffer, DNA wash buffer and elution buffer.

| Description                   | Pk        | Cat. No.   |
|-------------------------------|-----------|------------|
| Blood and tissue DNA mini kit | 5 Tests   | 13-3396-00 |
| Blood and tissue DNA mini kit | 50 Tests  | 13-3396-01 |
| Blood and tissue DNA mini kit | 200 Tests | 13-3396-02 |





Microspin tissue DNA mini kit, 50 tests

### DNA ISOLATION, MICROSPIN TISSUE DNA MINI KITS, PEQGOLD

Fast, easy, and economical kit for isolation of genomic DNA from small sample volumes and sizes for consistent PCR and analytical test results.

- No need for organic extractions
- No need for time consuming ethanol precipitations
- Enzymatic degradation of cellular RNA
- Efficient separation of inhibitors and contaminants
- Fast, 20 min or less

Typical starting amount 10 mg tissue. Speed of mini-column technology and specifically formulated buffers allow the purification of genomic DNA up to 60 kb.

Kit contains peqGOLD Microspin LE DNA columns, 2 ml collection tubes, BL buffer, TL buffer, Proteinase K solution, HBC buffer, LPA buffer DNA wash buffer and elution buffer.

| Description                   | Pk        | Cat. No.   |
|-------------------------------|-----------|------------|
| Microspin tissue DNA mini kit | 5 Tests   | 13-3096-00 |
| Microspin tissue DNA mini kit | 50 Tests  | 13-3096-01 |
| Microspin tissue DNA mini kit | 200 Tests | 13-3096-02 |

### DNA ISOLATION, BACTERIAL DNA MINI KIT, PEQGOLD

Bacterial DNA Mini Kit for the extraction of high quality DNA from gram positive and gram negative bacteria. For up to  $1 \times 10^9$  cells per preparation typical yield is up to 30 µg.

- Also suited to extractions from difficult to lyse bacteria
- Suitable for the simultaneous processing of multiple samples
- No need for organic extractions
- No need for time-consuming alcohol precipitations
- Efficient separation of inhibitors

Kit contains peqGOLD DNA columns, 2 ml collection tubes, Proteinase K, TL buffer, BL buffer, HBC buffer, Glass beads S, RNase A, Lysozyme, DNA wash and elution buffer.

| Description            | Pk        | Cat. No.   |
|------------------------|-----------|------------|
| Bacterial DNA Mini Kit | 5 Tests   | 13-3450-00 |
| Bacterial DNA Mini Kit | 50 Tests  | 13-3450-01 |
| Bacterial DNA Mini Kit | 200 Tests | 13-3450-02 |

### DNA ISOLATION, PLANT DNA MINI KIT, PEQGOLD

Dependable isolation of high-quality total cellular DNA from a variety of plant species and tissues. peqGOLD Homogenizer Columns remove cell debris and improve sample handling following lysis.

- Fast–Process 50 mg of fresh sample or 30 mg of dry sample in under 40 minutes
- Reproducible–Standardised method for reliable results from a variety of samples
- Safe–No organic extractions
- High-quality–Purified DNA suitable for most downstream applications

Each kit contains peqGOLD DNA mini columns, peqGOLD DNA homogenizer columns, 2 ml collection tubes, SP1 buffer, SP2 buffer, SP3 buffer, RNase A and elution buffer.

| Description        | Pk        | Cat. No.   |
|--------------------|-----------|------------|
| Plant DNA Mini Kit | 5 Tests   | 13-3486-00 |
| Plant DNA Mini Kit | 50 Tests  | 13-3486-01 |
| Plant DNA Mini Kit | 200 Tests | 13-3486-02 |



Total RNA kit, peqGOLD



peqGOLD microspin total RNA kit

RNA ISOLATION, TOTAL RNA KIT, PEQGOLD

Easy-to-use method for isolation up to 100 µg of total RNA from cultured eukaryotic cells and soft tissues < 1×10<sup>7</sup> cells or 30 mg tissue.

- Fast, 20 minutes or less
- Safe with no phenol/chloroform extractions
- Versatile with both spin and vacuum protocols available
- Homogenizer Column reduces RNA column clogging
- Compatible with peqGOLD DNase I Digestion Kit for lowest level of gDNA co-purification (13-1091-01)

See attached manual.

| Description   | Pk        | Cat. No.   |
|---------------|-----------|------------|
| Total RNA Kit | 5 Tests   | 13-6834-00 |
| Total RNA Kit | 50 Tests  | 13-6834-01 |
| Total RNA Kit | 200 Tests | 13-6834-02 |

RNA ISOLATION, MICROSPIN TOTAL RNA KIT, PEQGOLD

Purified RNA can be used in downstream applications such as RT-PCR, nuclease protection assay, and in vitro translation.

- High quality with up to 50 µg of total RNA from cultured eukaryotic cells, tissues such as laser dissected samples (LDS) or fine needle aspirates (FNA) suitable for a variety of downstream applications
- Fast, 30 minutes or less
- Safe with no phenol/chloroform extractions

Sample up to 5×10<sup>5</sup> eukaryotic cells or 5 mg tissue, yields up to 15 µg.

Each kit includes: peqGOLD Microspin RNA LE columns, 2 ml collection tubes, TRK lysis buffer, RWF wash buffer, nuclease-free water, carrier RNA.

| Description             | Pk        | Cat. No.   |
|-------------------------|-----------|------------|
| MicroSpin Total RNA Kit | 5 Tests   | 13-6831-00 |
| MicroSpin Total RNA Kit | 50 Tests  | 13-6831-01 |
| MicroSpin Total RNA Kit | 200 Tests | 13-6831-02 |

RNA ISOLATION, PLANT RNA KIT, PEQGOLD

Plant RNA Kit efficiently isolates RNA from a wide range of plant species and plant tissue, effectively removing genomic DNA, polysaccharides, phenol and other secondary metabolites. Starting amount can be up to 100 mg plant tissue. The isolated RNA is directly suitable for downstream applications.

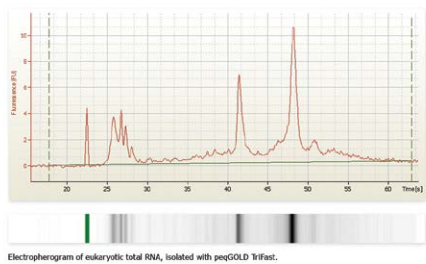
- Ideally suited for the simultaneous processing of multiple samples
- DNA Removing columns for efficient separation of DNA and cellular debris
- No need for organic extractions
- Immediate inactivation of endogenous and exogenous RNases
- Favoured binding of RNA molecules >200 bases
- Efficient separation of enzyme inhibitors and contaminants
- Final elution in RNase-free water

Kits contains peqGOLD RNA Mini columns, peqGOLS RNA Homogenizer columns, 2 ml collection tubes, NTL lysis buffer, SP buffer, RB buffer, RNA wash buffer I, nuclease-free water.



Plant RNA kit, peqGOLD, 50 preparations

| Description   | Pk        | Cat. No.   |
|---------------|-----------|------------|
| Plant RNA Kit | 5 Tests   | 13-6627-00 |
| Plant RNA Kit | 50 Tests  | 13-6627-01 |
| Plant RNA Kit | 200 Tests | 13-6627-02 |



DNA/RNA/PROTEIN PURIFICATION REAGENT,  
PEQGOLD TRIFAST™ AND TRIFAST™ FL

For isolation of RNA, DNA and protein from one sample.  
Contains phenol and guanidine isothiocyanate.

- Suitable for small and large samples
- Specialised 'FL' version optimised for extractions from fluids

| Description                                                           | Pk | Cat. No. |
|-----------------------------------------------------------------------|----|----------|
| TriFast™ for the extraction of DNA/RNA/protein, 100 ml                | 1  | 30-2010  |
| TriFast™ FL for the extraction of DNA/RNA/protein from fluids, 100 ml | 1  | 732-3314 |

PLASMID PURIFICATION, PLASMID MINIPREP KIT I, PEQGOLD

Plasmid Miniprep Kit I for the easy, quick and efficient extraction of highly pure plasmid DNA. Isolate up to 30 µg of high-quality plasmid DNA from 1 to 5 ml bacterial cultures in 30 minutes or less. Plasmid DNA obtained with peqGOLD Plasmid Miniprep kits can directly be used for a wide range of downstream applications.

- Suitable for the simultaneous processing of multiple samples
- Short hands-on and preparation times (<15 minutes)
- No need for organic extractions or precipitations
- Complete enzymatic degradation of all cellular RNA
- Efficient removal of enzyme inhibitors and contaminants

Each kit includes peqGOLD DNA columns and 2 ml collection tubes, RNase A solution, Solution I, II and III, HBC buffer and DNA wash buffer, and elution buffer.

| Description            | Pk        | Cat. No.   |
|------------------------|-----------|------------|
| Plasmid Miniprep Kit I | 5 Tests   | 13-6942-00 |
| Plasmid Miniprep Kit I | 50 Tests  | 13-6942-01 |
| Plasmid Miniprep Kit I | 200 Tests | 13-6942-02 |



RNAPURE™, PEQGOLD

Ready to use reagent for quick and simple purification of high quality total RNA. Contains phenol and guanidine isothiocyanate.

Suitable for small and large samples

- Reliable and reproducible with high purity RNA

| Description                               | Pk | Cat. No. |
|-------------------------------------------|----|----------|
| RNAPure™ for total RNA extraction, 100 ml | 1  | 732-3312 |



Plasmid miniprep kit II

PLASMID PURIFICATION, PLASMID MINIPREP KIT II, PEQGOLD

Isolate up to 40–70 µg of high-quality plasmid DNA from up to 15 mL bacterial cultures in 30 minutes or less. Simplified with VWR peqGold Mini Column II technology into three quick steps: bind, wash, and elute.

- Safe, no phenol/chloroform extractions
- Versatile with both spin and vacuum formats available
- High quality DNA is suitable for a wide range of downstream applications

Each kit contain peqGOLD DNA columns, 2 ml collection tubes, Solution I, Solution II, Solution III, HBC buffer, DNA wash buffer, RNase A, Elution buffer.

| Description             | Pk        | Cat. No.   |
|-------------------------|-----------|------------|
| Plasmid Miniprep Kit II | 5 Tests   | 13-6945-00 |
| Plasmid Miniprep Kit II | 50 Tests  | 13-6945-01 |
| Plasmid Miniprep Kit II | 200 Tests | 13-6945-02 |



PCR clean-up, cycle-pure kits, peqGOLD

### PCR CLEAN-UP, CYCLE-PURE KITS, PEQGOLD

Purification of single or double-stranded DNA from PCR or other enzymatic reactions.

- Downstream application or cloning, Sanger sequencing, in vitro transcription and nucleic acid labelling.
- Elution volume of 30–50 µl
- Starting amount of 5–50 µl enzymatic reactions
- DNA has >90% recovery, 70 bp to 20 kb

Completely removes primers, nucleotides, enzymes, salts, and other impurities from the DNA sample.

Kit contains peqGOLD DNA columns, 2 ml collection tubes, CP buffer, DNA wash buffer, Elution buffer.

| Description    | Pk        | Cat. No.   |
|----------------|-----------|------------|
| Cycle-Pure Kit | 5 Tests   | 13-6492-00 |
| Cycle-Pure Kit | 50 Tests  | 13-6492-01 |
| Cycle-Pure Kit | 200 Tests | 13-6492-02 |



MicroSpin cycle-pure kit, peqGOLD

### DNA CLEAN-UP, MICROSPIN CYCLE-PURE KITS, PEQGOLD

Clean up DNA in low elution volume (10–15 µl) from PCR reactions using spin columns.

Starting amount up to 10 µg DNA

- DNA recovered >90% recovery, 70 bp to 20 kb

Modified from the peqGOLD Cycle-Pure Kit.

Each kit comprises peqGOLD MicroSpin DNA columns, 2 ml collection tubes, CP buffer, DNA wash buffer and Elution buffer.

| Description              | Pk        | Cat. No.   |
|--------------------------|-----------|------------|
| MicroSpin Cycle-Pure Kit | 5 Tests   | 13-6293-00 |
| MicroSpin Cycle-Pure Kit | 50 Tests  | 13-6293-01 |
| MicroSpin Cycle-Pure Kit | 200 Tests | 13-6293-02 |



### ONE-STEP PCR CLEAN-UP, EXOCLEANUP FAST

VWR ExoCleanUp FAST PCR reagent is a one-step PCR clean-up reagent for optimal sequencing results, consisting of a balanced combination of a heat-labile exonuclease I (HL-ExoI) and a recombinant shrimp alkaline phosphatase (rSAP).

- Designed to clean-up PCR products in 5 minutes
- No need for spin columns or magnetic beads
- Treatment improves downstream applications, such as DNA sequencing and SNP analysis

Treatment of amplified PCR products with this reagent helps to remove residual primers and single-stranded DNA, and inactivates excess dNTPs by dephosphorylation. After enzymatic treatment at 37 °C for a minimum of 2 minutes, this reagent is completely inactivated by heating at 80 °C for a minimum of 3 minutes.

| Description                          | Sample size | Pk          | Cat. No. |
|--------------------------------------|-------------|-------------|----------|
| ExoCleanUp FAST PCR clean-up reagent | 1x0,2 ml    | 100 Tests   | 733-2592 |
| ExoCleanUp FAST PCR clean-up reagent | 1x1 ml      | 500 Tests   | 733-2593 |
| ExoCleanUp FAST PCR clean-up reagent | 10x1 ml     | 5.000 Tests | 733-2594 |



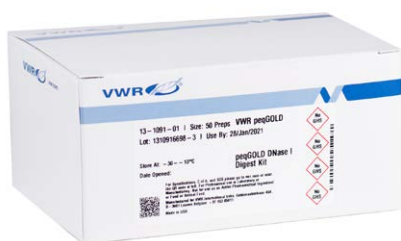
### DNA CLEAN-UP, GEL EXTRACTION KIT, PEQGOLD

Purifies DNA bands 70 bp–20 kb in length from agarose gels. The DNA band of interest is excised from the gel, dissolved in binding buffer, and efficiently processed in a peqGOLD DNA column. >90% recovery. Elution volume: 30–50 µl.

- Simple protocol and short hands-on times of less than 15 minutes
- Internal control of reaction conditions by pH sensitive indicator
- No need for organic extractions or precipitations
- Efficient removal of inhibitors and contaminants
- No shearing of DNA or carry-over of silica material

Kit contains peqGOLD DNA columns and 2 ml collection tubes, XP» Binding buffer and Elution buffer.

| Description        | Pk        | Cat. No.   |
|--------------------|-----------|------------|
| Gel Extraction Kit | 5 Tests   | 13-2500-00 |
| Gel Extraction Kit | 50 Tests  | 13-2500-01 |
| Gel Extraction Kit | 200 Tests | 13-2500-02 |



DNase I digest kit, 50 tests

### DNASE I DIGEST KIT, PEQGOLD

For quick and easy removal of unwanted DNA directly on the column during RNA preparation.

- Efficient removal of contaminating DNA from RNA preparations
- Free from RNases and inhibitors

Kit contains RNase-free DNase I and DNase I Digestion Buffer.

| Description        | Pk       | Cat. No.   |
|--------------------|----------|------------|
| DNase I Digest Kit | 5 Tests  | 13-1091-00 |
| DNase I Digest Kit | 50 Tests | 13-1091-01 |

### PROTEINASE K, FROM TRITIRACHIUM ALBUM, CHROMATOGRAPHICALLY PURIFIED

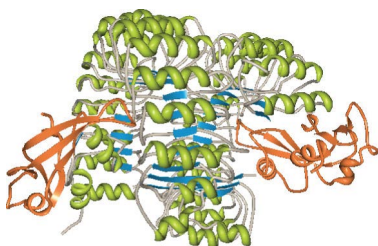


Activity approximately 30 Anson units per g.

1 Anson unit is the amount of enzyme which liberates 1 mmol of Folin positive amino acids per minute at pH 7,5 and 35 °C using haemoglobin as substrate. Powerful proteolytic activity on proteins, glycoproteins and peptides. Used for the digestion of human and animal tissues prior to and to inactivate DNases and RNases during isolation of nucleic acids.

|                     |                                              |
|---------------------|----------------------------------------------|
| CAS No.             | 39450-01-6                                   |
| Colour              | white                                        |
| Enzyme activity     | Min.30,0 mAU/mg (Haemoglobin; pH 7,5; 37 °C) |
| Enzyme name         | Proteinase K                                 |
| Formulation         | Lyophilisate                                 |
| Species             | Tritirachium album                           |
| Storage conditions  | Freezer                                      |
| Tested applications | For electrophoresis                          |

| Pk     | Cat. No. |
|--------|----------|
| 100 mg | 390972X  |
| 10 g   | 39097CB  |



Structure of ribonuclease inhibitor-angiogenin complex. PDB 1A4Y. Papageorgiou, A.C., Shapiro, R., and Acharya, K.R. (1997) *EMBO J.* **16**, 5162–5177.

### RIBONUCLEASE INHIBITOR (RNASE INHIBITOR) (FROM HUMAN PLACENTA) FOR BIOTECHNOLOGY

RNase inhibitor is used to inhibit the activity of RNases in reaction mixtures for cDNA synthesis and *in vitro* transcription, as well as for long-term storage of valuable RNA samples. A unit of this protein will inhibit 50% of the activity of 5 ng of RNase A.

Human placental source, 40 KU/ml

Activity @25 °C: 10 U/ul

DNase (endonuclease): None

DNase (exonuclease): None

|                      |                        |
|----------------------|------------------------|
| Biological activity  | 40 KU/ml               |
| Grade                | For biotechnology      |
| Protein synonyms     | RNase inhibitor        |
| Protein/peptide name | Ribonuclease inhibitor |
| Source               | Placenta               |
| Species              | Human                  |

| Pk   | Cat. No. |
|------|----------|
| 2 KU | E633-2KU |

### WATER FOR PCR

The PCR grade water is ultrapure H<sub>2</sub>O, tested for contaminating activities, with no trace of endonuclease activity, nicking activity or exonuclease activity. Absence of human DNA is tested by PCR

| Description   | Pack type    | Pk Info | Pk    | Cat. No. |
|---------------|--------------|---------|-------|----------|
| Water for PCR | Plastic tube | 6x5 ml  | 1 KIT | 733-2573 |

### WATER NUCLEASE FREE

Water, nuclease-free, molecular biology grade (RNase, DNase and protease tested).

| Description         | Pack type      | Pk     | Cat. No. |
|---------------------|----------------|--------|----------|
| Water nuclease free | Plastic bottle | 100 ml | 436912C  |

### TE (TRIS-EDTA) BUFFER, pH 8,0 FOR BIOTECHNOLOGY



Ready to use Tris-EDTA buffer.

- Composition: 10 mM Tris, 1 mM EDTA
- pH 8,0

| Description       | Pk     | Cat. No.   |
|-------------------|--------|------------|
| TE buffer, pH 8,0 | 100 ml | E112-100ML |
| TE buffer, pH 8,0 | 500 ml | E112-500ML |

## 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





mySPEC



M4

### MICROVOLUME SPECTROPHOTOMETERS, MYSPEC

mySPEC allows you to perform nucleic acid and protein microvolume concentration plus purity measurements.

- Large dynamic range (2 ng/μl to 15 μg/μl (dsDNA)) eliminates error-prone dilutions and calculations
- Stand-alone 8,4" touch screen versions are also available
- Automated data analysis after user-defined purity setting

mySPEC Twin has a cuvette port so that cell density or enzymatic measurements can be performed. It combines microvolume and cuvette functions with temperature control (30 to 40 °C) and stirrer (0; 50; 1000 min<sup>-1</sup>).

Pre-configured modules allow for rapid, fully automated data analysis, including concentration and purity of RNA and DNA, protein measurements (A280, Bradford, Lowry, BCA, Pierce 660), determination of labelling efficiencies, colorimetric assays on enzymatic activities and cell density measurements.

|                     |                                   |
|---------------------|-----------------------------------|
| Light source        | Pulsed xenon                      |
| Detector            | Charged-couple device (CCD) array |
| Absorbance range    | 0,02 – 300 A                      |
| Absorbance accuracy | ±2% @ 0,76 A @ 257 nm             |
| Output              | USB                               |
| Sample size         | 1 μl                              |
| Electrical          | 12 V/30 W                         |
| Wavelength range    | 190 - 840 nm                      |
| Weight              | 2 kg                              |

| Description                                                                | Model             | Pk    | Cat. No. |
|----------------------------------------------------------------------------|-------------------|-------|----------|
| Microvolume spectrophotometer with USB cable and software                  | mySPEC            | 1     | 732-2533 |
| Stand-alone microvolume spectrophotometer                                  | mySPEC Touch      | 1 SET | 732-2534 |
| Microvolume spectrophotometer with cuvette housing, USB cable and software | mySPEC Twin       | 1     | 732-2535 |
| Stand-alone microvolume spectrophotometer with cuvette housing             | mySPEC Twin Touch | 1 SET | 732-2536 |

### UV/VISIBLE SPECTROPHOTOMETER, M4

The M4 single split-beam spectrophotometer, with flashing xenon lamp, is an easy to use, highly reliable and accurate product.

- Single split-beam design for sample and blank variability can be monitored at the same time
- Xenon flash lamp with a very strong energy in the UV and visible range
- Connects to a computer based on Windows® through various interfaces

Measure absorbance and transmission at any defined wavelength, generate a graph and search for peaks and valleys, also analyse the graph via built-in methods.

The application can be extended to luminosity determination, multiple wavelength measurement, quantitative analysis, dynamic determination, DNA/protein determination and spectral measurements.

Supplied with a user manual, 10 mm quartz cuvette, 10 mm glass cuvette, fuse, power cable and dust cover.

|                    |                                                                                              |
|--------------------|----------------------------------------------------------------------------------------------|
| Display            | 5" colour touch screen                                                                       |
| Wavelength range   | 190–1100 nm                                                                                  |
| Spectral bandwidth | 2 nm                                                                                         |
| Light source       | Flashing xenon lamp                                                                          |
| Languages          | 6 can be switched: English, German, French, Spanish, Portuguese, simplified Chinese, Russian |
| Output             | USB; serial port; Bluetooth® (optional)                                                      |
| W×D×H              | 456×360×185 mm                                                                               |
| Weight             | 10,5 kg                                                                                      |

| Description                  | Model | Pk | Cat. No. |
|------------------------------|-------|----|----------|
| UV/Visible spectrophotometer | M4    | 1  | 634-1087 |





P4

### UV/VISIBLE SPECTROPHOTOMETER, P4

The P4 UV/Visible spectrophotometer is an easy to use instrument with advanced performance.

- Highly accurate and reliable
- Simple, elegant design with aluminum base
- Easy to change lamp, user friendly interface

Provides several basic functions, such as photometry test, quantitation test and spectrum scanning.

|                          |                               |
|--------------------------|-------------------------------|
| Absorbance range         | –0,3...+3,0 A                 |
| Photometric range        | 0–200% T                      |
| Wavelength accuracy      | ±0,5 nm                       |
| Wavelength repeatability | <0,2 nm                       |
| Scanning speed           | 4200 nm/min                   |
| Light source             | Tungsten/deuterium            |
| Memory                   | 236 Kb                        |
| WxDxH                    | 456×360×185 mm                |
| Weight                   | 10,7 kg                       |
| Power                    | 100–240 V AC; 50/60 Hz; 120 W |

| Description                  | Model | Range       | Pk | Cat. No. |
|------------------------------|-------|-------------|----|----------|
| UV/Visible spectrophotometer | P4    | 190–1100 nm | 1  | 634-1089 |



### UV/VISIBLE SPECTROPHOTOMETER, UV-6300PC

UV/Visible spectrophotometer with double-beam optical system, designed for applications including general research, pharmaceutical, biochemical and clinical laboratory use, new material development and quality control.

- Standard photometrics: Absorption, transmission and concentration
- Quantitative analysis and kinetics, multi-wavelength scan and spectrum scan
- DNA/RNA and protein analysis
- Internal control via keypad and PC control (optional)
- UV-Vis Analyst software for more powerful data processing and expanded data collecting

Supplied with 4 optical glass cells, 2 quartz cells, dust cover, USB cable, USB (8 GB) stick, UV-Vis Analyst software for PC control, cell holders for sample and reference, power cables with UK, CH and EU plugs.

|                       |                                                          |
|-----------------------|----------------------------------------------------------|
| Display               | LCD, 320×240 P                                           |
| Absorbance range      | –0,3...+3,0 A                                            |
| Optical design        | Double beam                                              |
| Absorbance accuracy   | ±0,002 A @ 1,0 A                                         |
| Photometric accuracy  | ≤0,3% T                                                  |
| Photometric range     | 0 - 200% T; 0 - 9999 conc.                               |
| Photometric stability | 0,001 A/h @ 500 nm                                       |
| Wavelength accuracy   | ±0,3 nm                                                  |
| Wavelength range      | 190–1100 nm                                              |
| Stray light           | ≤0,05% T @ 220 and 360 nm                                |
| Scanning speed        | 100 - 3000 nm/min. Intervals: 0,1; 0,2; 0,5; 1,0; 5,0 nm |
| Light source          | Tungsten/deuterium                                       |
| Memory                | 200 results and 200 curves                               |
| Languages             | English, French, German, Spanish                         |
| Interfaces            | Parallel printer                                         |
| Output                | USB                                                      |
| WxDxH                 | 590×420×260 mm                                           |
| Weight                | 26 kg                                                    |

| Description                  | Model     | Pk | Cat. No. |
|------------------------------|-----------|----|----------|
| UV/Visible spectrophotometer | UV-6300PC | 1  | 634-6041 |

## STANDARD CUVETTES

| Description | Height (mm) | Path length (mm) | Window material | Pk | Cat. No.        |
|-------------|-------------|------------------|-----------------|----|-----------------|
| Flow cell   | 15          | 5                | Optical glass   | 1  | <b>634-0690</b> |
| Flow cell   | 15          | 10               | Optical glass   | 1  | <b>634-0691</b> |
| Flow cell   | 15          | 20               | Optical glass   | 1  | <b>634-0692</b> |
| Flow cell   | 15          | 30               | Optical glass   | 1  | <b>634-0693</b> |
| Flow cell   | 15          | 5                | Quartz          | 1  | <b>634-0694</b> |
| Flow cell   | 15          | 10               | Quartz          | 1  | <b>634-0695</b> |
| Flow cell   | 15          | 20               | Quartz          | 1  | <b>634-0696</b> |
| Flow cell   | 15          | 30               | Quartz          | 1  | <b>634-0697</b> |

## SQUARE CUVETTES

| Description     | Path length (mm) | Window material | Pk | Cat. No.        |
|-----------------|------------------|-----------------|----|-----------------|
| Square cuvettes | 10               | Glass           | 4  | <b>634-6013</b> |
| Square cuvettes | 20               | Glass           | 2  | <b>634-6014</b> |
| Square cuvettes | 30               | Glass           | 2  | <b>634-6015</b> |
| Square cuvettes | 50               | Glass           | 2  | <b>634-6016</b> |
| Square cuvette  | 100              | Glass           | 1  | <b>634-6017</b> |
| Square cuvettes | 10               | Quartz          | 2  | <b>634-6018</b> |
| Square cuvettes | 20               | Quartz          | 2  | <b>634-6019</b> |
| Square cuvettes | 30               | Quartz          | 2  | <b>634-6020</b> |
| Square cuvettes | 50               | Quartz          | 2  | <b>634-6021</b> |
| Square cuvette  | 100              | Quartz          | 1  | <b>634-6022</b> |

## MICRO CUVETTES

| Description | Height (mm) | Volume (µl) | Path length (mm) | Window material | Pk | Cat. No.        |
|-------------|-------------|-------------|------------------|-----------------|----|-----------------|
| Micro cell  | 15          | 100         | 10               | Quartz          | 1  | <b>634-0688</b> |
| Micro cell  | 15          | 200         | 10               | Quartz          | 1  | <b>634-0689</b> |
| Micro cell  | 15          | 500         | 10               | Quartz          | 1  | <b>634-0625</b> |

## MICRO CUVETTES

- Micro cuvettes with PTFE lids or stoppers.
- Suitable for high precision analytical techniques.
- Please note that pairs are spectrally calibrated.



104.002-QS

| Description                                             | Type  | Height (mm) | Volume (µl) | Path length (mm) | Window material    | Pk     | Cat. No.        |
|---------------------------------------------------------|-------|-------------|-------------|------------------|--------------------|--------|-----------------|
| <b>Micro cuvettes with PTFE stoppers</b>                |       |             |             |                  |                    |        |                 |
| Micro cell with PTFE stopper                            | Micro | 40          | 400         | 10               | Quartz (Suprasil®) | 1      | <b>634-9242</b> |
| Micro cell with PTFE stopper, matched                   | Micro | 40          | 400         | 10               | Quartz (Suprasil®) | 1 PAIR | <b>634-0858</b> |
| Micro cell with PTFE stopper and black windows          | Micro | 40          | 400         | 10               | Quartz (Suprasil®) | 1      | <b>634-9241</b> |
| Micro cell with PTFE stopper and black windows, matched | Micro | 40          | 400         | 10               | Quartz (Suprasil®) | 1 PAIR | <b>634-0981</b> |
| <b>Micro cuvettes with PTFE lids</b>                    |       |             |             |                  |                    |        |                 |
| Micro cell with PTFE lid                                | Micro | 25          | 700         | 10               | Quartz (Suprasil®) | 1      | <b>634-9236</b> |
| Micro cell with PTFE lid and black windows              | Micro | 25          | 300         | 10               | Quartz (Suprasil®) | 1      | <b>634-9238</b> |
| Micro cell with PTFE lid                                | Micro | 45          | 700         | 10               | Optical glass      | 1      | <b>634-9079</b> |
| Micro cell with PTFE lid                                | Micro | 45          | 700         | 10               | Quartz (Suprasil®) | 1      | <b>634-9080</b> |
| Micro cell with PTFE lid, matched                       | Micro | 45          | 700         | 10               | Quartz (Suprasil®) | 1 PAIR | <b>634-0969</b> |
| Micro cell with PTFE lid and black windows              | Micro | 45          | 700         | 10               | Optical glass      | 1      | <b>634-9214</b> |
| Micro cell with PTFE lid and black windows              | Micro | 45          | 700         | 10               | Quartz (Suprasil®) | 1      | <b>634-9081</b> |
| Micro cell with PTFE lid and black windows, matched     | Micro | 45          | 700         | 10               | Quartz (Suprasil®) | 1 PAIR | <b>634-0970</b> |
| Micro cell with PTFE lid                                | Micro | 45          | 500         | 10               | Quartz (Suprasil®) | 1      | <b>634-9240</b> |
| Micro cell with PTFE lid and black windows              | Micro | 45          | 500         | 10               | Quartz (Suprasil®) | 1      | <b>634-1060</b> |



ULTRA-MICRO CUVETTES

Ultra-micro cuvettes with PE stoppers.  
Please note that pairs are spectrally calibrated.

| Type                 | Height (mm) | Centre height | Volume (µl) | Path length (mm) | Window material    | Pk     | Cat. No. |
|----------------------|-------------|---------------|-------------|------------------|--------------------|--------|----------|
| Ultra micro          | 45          | 8,5 mm        | 20          | 10               | Quartz (Suprasil®) | 1      | 634-0977 |
| Ultra micro          | 45          | 15 mm         | 20          | 10               | Quartz (Suprasil®) | 1      | 634-0976 |
| Ultra micro          | 45          | 8,5 mm        | 50          | 10               | Quartz (Suprasil®) | 1      | 634-9093 |
| Ultra micro          | 45          | 8,5 mm        | 50          | 10               | Quartz (Suprasil®) | 1      | 634-9092 |
| Ultra micro          | 45          | 15 mm         | 50          | 10               | Quartz (Suprasil®) | 1      | 634-9328 |
| Ultra micro          | 45          | 15 mm         | 50          | 10               | Quartz (Suprasil®) | 1      | 634-9091 |
| Ultra micro          | 12          | 4,5 mm        | 120         | 10               | Quartz (Suprasil®) | 1      | 634-0973 |
| Ultra micro          | 8,1         | 4,5 mm        | 120         | 10               | Quartz (Suprasil®) | 1      | 634-0972 |
| Ultra micro, matched | 45          | 8,5 mm        | 100         | 10               | Quartz (Suprasil®) | 1 PAIR | 634-0975 |
| Ultra micro          | 45          | 8,5 mm        | 100         | 10               | Quartz (Suprasil®) | 1      | 634-9090 |
| Ultra micro, matched | 45          | 15 mm         | 100         | 10               | Quartz (Suprasil®) | 1 PAIR | 634-0974 |
| Ultra micro          | 45          | 15 mm         | 100         | 10               | Quartz (Suprasil®) | 1      | 634-9089 |
| Ultra micro          | 45          | 8,5 mm        | 160         | 10               | Quartz (Suprasil®) | 1      | 634-9088 |
| Ultra micro          | 45          | 15 mm         | 160         | 10               | Quartz (Suprasil®) | 1      | 634-9087 |

ABSORPTION CUVETTES WITH LIDS

These semi-micro cuvettes are specially designed for research needs.  
– Cells with PTFE lid  
Please note that pairs are spectrally calibrated.

| Type                | Height (mm) | Volume | Path length (mm) | Window material        | Pk     | Cat. No. |
|---------------------|-------------|--------|------------------|------------------------|--------|----------|
| Semi-micro          | 45          | 700 µl | 5                | Quartz (Suprasil®)     | 1      | 634-9156 |
| Semi-micro          | 45          | 1 ml   | 10               | Optical glass          | 1      | 634-9144 |
| Semi-micro          | 45          | 1 ml   | 10               | Quartz (Suprasil®)     | 1      | 634-9154 |
| Semi-micro          | 45          | 1,4 ml | 10               | Optical glass          | 1      | 634-9112 |
| Semi-micro          | 45          | 1,4 ml | 10               | Quartz (Suprasil®)     | 1      | 634-9122 |
| Semi-micro          | 45          | 1,4 ml | 10               | Quartz (Suprasil® 300) | 1      | 634-9132 |
| Semi-micro, matched | 45          | 1,4 ml | 10               | Quartz (Suprasil®)     | 1 PAIR | 634-0849 |
| Semi-micro, matched | 45          | 1,4 ml | 10               | Quartz (Suprasil®)     | 1 PAIR | 634-0856 |
| Semi-micro          | 45          | 1,4 ml | 10               | Optical glass          | 1      | 634-9148 |
| Semi-micro          | 45          | 1,4 ml | 10               | Quartz (Suprasil®)     | 1      | 634-9158 |
| Semi-micro          | 45          | 1,4 ml | 10               | Treated glass          | 1      | 634-9049 |
| Semi-micro          | 45          | 7 ml   | 50               | Optical glass          | 1      | 634-9115 |
| Semi-micro          | 45          | 7 ml   | 50               | Quartz (Suprasil®)     | 1      | 634-9125 |

| Description                    | Pk | Cat. No. |
|--------------------------------|----|----------|
| Accessories                    |    |          |
| PTFE stoppers with NS5 fitting | 5  | 634-1145 |
| PTFE stoppers with NS7 fitting | 5  | 634-1146 |



MACRO CUVETTES

Disposable macro cuvettes, four clear sides.  
– Clear and clean optical path  
– Four windows for precise measurements  
– Manufactured under controlled room conditions  
Specially designed for fluorescence spectroscopy.

| Range        | Height (mm) | Volume (ml) | Path length (mm) | Window material | Pk  | Cat. No. |
|--------------|-------------|-------------|------------------|-----------------|-----|----------|
| 340 – 900 nm | 35          | 2,5 – 4,5   | 10               | PS              | 100 | 634-1067 |



## ABSORPTION CUVETTES, 100

High quality cuvettes made from glass or quartz for on-line spectrophotometric analysis.

Please note that pairs are spectrally calibrated.

ISO 17025 certified NIST traceable reference standards and immersion probes.

| Type                 | Height (mm) | Volume  | Path length (mm) | Window material        | Pk     | Cat. No.        |
|----------------------|-------------|---------|------------------|------------------------|--------|-----------------|
| <b>Glass models</b>  |             |         |                  |                        |        |                 |
| Macro                | 45          | 350 µl  | 1                | Optical glass          | 1      | <b>634-9011</b> |
| Macro                | 45          | 700 µl  | 2                | Optical glass          | 1      | <b>634-9012</b> |
| Macro, matched       | 45          | 700 µl  | 2                | Optical glass          | 1 PAIR | <b>634-0961</b> |
| Macro                | 45          | 1,75 ml | 5                | Optical glass          | 1      | <b>634-9013</b> |
| Macro                | 45          | 3,5 ml  | 10               | Optical glass          | 1      | <b>634-9014</b> |
| Macro, matched       | 45          | 3,5 ml  | 10               | Optical glass          | 1 PAIR | <b>634-0842</b> |
| Macro                | 45          | 7 ml    | 20               | Optical glass          | 1      | <b>634-9015</b> |
| Macro, matched       | 45          | 7 ml    | 20               | Optical glass          | 1 PAIR | <b>634-0960</b> |
| Macro                | 45          | 14 ml   | 40               | Optical glass          | 1      | <b>634-9016</b> |
| Macro, matched       | 45          | 14 ml   | 40               | Optical glass          | 1 PAIR | <b>634-0963</b> |
| Macro                | 45          | 17,5 ml | 50               | Optical glass          | 1      | <b>634-9017</b> |
| Macro, matched       | 45          | 17,5 ml | 50               | Optical glass          | 1 PAIR | <b>634-0846</b> |
| Macro                | 45          | 35 ml   | 100              | Optical glass          | 1      | <b>634-9018</b> |
| Macro, matched       | 45          | 35 ml   | 100              | Optical glass          | 1 PAIR | <b>634-0957</b> |
| <b>Quartz models</b> |             |         |                  |                        |        |                 |
| Macro                | 45          | 350 µl  | 1                | Quartz (Suprasil®)     | 1      | <b>634-9021</b> |
| Macro                | 45          | 350 µl  | 1                | Quartz (Suprasil® 300) | 1      | <b>634-9031</b> |
| Macro                | 45          | 350 µl  | 1                | Quartz (Suprasil®)     | 1      | <b>634-0959</b> |
| Macro, matched       | 45          | 350 µl  | 1                | Quartz (Suprasil®)     | 1 PAIR | <b>634-0845</b> |
| Macro                | 45          | 700 µl  | 2                | Quartz (Suprasil®)     | 1      | <b>634-9022</b> |

| Type                | Height (mm) | Volume  | Path length (mm) | Window material        | Pk     | Cat. No.        |
|---------------------|-------------|---------|------------------|------------------------|--------|-----------------|
| <b>Glass models</b> |             |         |                  |                        |        |                 |
| Macro               | 45          | 700 µl  | 2                | Quartz (Suprasil® 300) | 1      | <b>634-9032</b> |
| Macro, matched      | 45          | 700 µl  | 2                | Quartz (Suprasil®)     | 1 PAIR | <b>634-0962</b> |
| Macro               | 45          | 1,75 ml | 5                | Quartz (Suprasil®)     | 1      | <b>634-9023</b> |
| Macro               | 45          | 1,75 ml | 5                | Quartz (Suprasil® 300) | 1      | <b>634-9033</b> |
| Macro, matched      | 45          | 1,75 ml | 5                | Quartz (Suprasil®)     | 1 PAIR | <b>634-0965</b> |
| Macro               | 45          | 3,5 ml  | 10               | Quartz (Suprasil®)     | 1      | <b>634-9024</b> |
| Macro               | 45          | 3,5 ml  | 10               | Quartz (Suprasil® 300) | 1      | <b>634-9034</b> |
| Macro, matched      | 45          | 3,5 ml  | 10               | Quartz (Suprasil®)     | 1 PAIR | <b>634-0843</b> |
| Macro, matched      | 45          | 3,5 ml  | 10               | Quartz (Suprasil® 300) | 1 PAIR | <b>634-0844</b> |
| Macro               | 45          | 7 ml    | 20               | Quartz (Suprasil®)     | 1      | <b>634-9025</b> |
| Macro               | 45          | 7 ml    | 20               | Quartz (Suprasil® 300) | 1      | <b>634-9035</b> |
| Macro               | 45          | 14 ml   | 40               | Quartz (Suprasil®)     | 1      | <b>634-9026</b> |
| Macro               | 45          | 14 ml   | 40               | Quartz (Suprasil® 300) | 1      | <b>634-9036</b> |
| Macro, matched      | 45          | 14 ml   | 40               | Quartz (Suprasil®)     | 1 PAIR | <b>634-0964</b> |
| Macro               | 45          | 17,5 ml | 50               | Quartz (Suprasil®)     | 1      | <b>634-9027</b> |
| Macro               | 45          | 17,5 ml | 50               | Quartz (Suprasil® 300) | 1      | <b>634-9037</b> |
| Macro, matched      | 45          | 17,5 ml | 50               | Quartz (Suprasil®)     | 1 PAIR | <b>634-0847</b> |
| Macro               | 45          | 35 ml   | 100              | Quartz (Suprasil®)     | 1      | <b>634-9028</b> |
| Macro               | 45          | 35 ml   | 100              | Quartz (Suprasil® 300) | 1      | <b>634-9038</b> |
| Macro, matched      | 45          | 35 ml   | 100              | Quartz (Suprasil®)     | 1 PAIR | <b>634-0958</b> |



Macro



Semi-micro

## DISPOSABLE CUVETTES

Disposable cuvettes in either optical polystyrene (PS) or polymethyl methacrylate (PMMA), for use with most polar solvents, acids and alkaline solutions.

- Minimum variation of extinction values
- Recessed windows, clear and clean optical path
- Optimum transmittance and reduced risk of contamination

For determinations in water analysis, chemistry and life science applications.

Resealable – cuvettes are assorted by cavity numbers.

| Type       | Range        | Volume (ml) | Path length (mm) | Window material | Pk  | Cat. No.        |
|------------|--------------|-------------|------------------|-----------------|-----|-----------------|
| Semi-micro | 300 – 900 nm | 1,5 – 3     | 10               | PMMA            | 100 | <b>634-0678</b> |
| Macro      | 300 – 900 nm | 2,5 – 4,5   | 10               | PMMA            | 100 | <b>634-0677</b> |
| Semi-micro | 340 – 900 nm | 1,5 – 3     | 10               | PS              | 100 | <b>634-0676</b> |
| Macro      | 340 – 900 nm | 2,5 – 4,5   | 10               | PS              | 100 | <b>634-0675</b> |



**MICROCENTRIFUGE, MINISTAR / MINISTAR BLUELINE**

This personal centrifuge has a fixed speed of 6000 min<sup>-1</sup>/2000 ×g, and is designed for applications requiring relatively low g-forces, such as microfiltration, cell separation and quick spin downs from the walls of tubes.

- Quick-release rotors: No tools are required to exchange the rotors or attach them to the motor shaft
- Easy to operate: Close the lid of the centrifuge to start a run; press and release the tab on lid to stop

The tube rotor spins up to eight individual 1,5/2,0 ml plastic microcentrifuge tubes. It will also accept 0,5 and 0,4 ml tubes with the supplied adapters. The additional PCR rotor is designed to centrifuge four 8×0,2 ml PCR strip tubes. It will also accept up to 32 individual 0,2 ml tubes.

Supplied with 8×1,5/2,0 ml rotor, 4×(8×0,2 ml) strip tube rotor, 8 adapters for 0,4 ml tubes and 8 adapters for 0,5 ml tubes.

| Model                           | MiniStar                                       | MiniStar blueLine |
|---------------------------------|------------------------------------------------|-------------------|
| Max. capacity                   | 8×1,5/2,0 ml tubes or 4×(8×0,2 ml) tube strips |                   |
| Max. speed (min <sup>-1</sup> ) | 6000                                           |                   |
| Max. RCF (×g)                   | 2000                                           |                   |
| Noise level (dB(A))             | 56                                             |                   |
| Power consumption (W)           | 5                                              |                   |
| W×D×H (mm)                      | 132×132×112                                    |                   |
| Weight (kg)                     | 0,55                                           |                   |
| Acceleration/deceleration time  | 5/1,5 s                                        |                   |

| Description                                                                | Pk | Cat. No. |
|----------------------------------------------------------------------------|----|----------|
| Microcentrifuge MiniStar, white, with rotors and adapters, EU-plug         | 1  | 521-2161 |
| Microcentrifuge MiniStar blueLine, blue, with rotors and adapters, EU-plug | 1  | 521-2319 |



**MICROCENTRIFUGES, VENTILATED/REFRIGERATED, MICRO STAR 17 / 17R**

Micro Star 17 and 17R microcentrifuges combine power, versatility and convenience in a safe, compact, easy to use laboratory instrument. Both the ventilated Micro Star 17 and the refrigerated Micro Star 17R are designed to accelerate the routine sample preparation process. The special biocontainment rotor lid for one-click rotor opening and closing, shortens retrieval time compared to screw on lids.

- Quiet and powerful performance up to 17000 ×g
- ClickSeal® biocontainment rotor lid keeps the user and the samples safe
- Easy operation; intuitive controls and bright, easy to read displays
- Separate short-spin key for quick centrifugation

Supplied with 24-place rotor for 1,5/2,0 ml tubes and aerosol-tight rotor lid.

| Model                           | Micro Star 17                                   | Micro Star 17R |
|---------------------------------|-------------------------------------------------|----------------|
| Temperature (°C)                | -                                               | -9...+40       |
| Max. speed (min <sup>-1</sup> ) | 13300                                           |                |
| Max. RCF (×g)                   | 17000                                           |                |
| Timer                           | 1 – 99 min (in increments of 1 min) + Hold mode |                |
| Noise level (dB(A))             | <56                                             | <50            |
| W×D×H (mm)                      | 240×350×230                                     | 292×440×330    |

| Description                                   | Pk | Cat. No. |
|-----------------------------------------------|----|----------|
| Microcentrifuge, ventilated, Micro Star 17    | 1  | 521-1646 |
| Microcentrifuge, refrigerated, Micro Star 17R | 1  | 521-1647 |



Centrifuge, Microstar 30R

**MICROCENTRIFUGE, HIGH-SPEED, UNIVERSAL, REFRIGERATED, MICRO STAR 30R**

The compact Micro Star 30R refrigerated centrifuge is an economic, versatile and easy-to-use cross-over centrifuge which combines the features of a high speed microcentrifuge and a multipurpose centrifuge. This quiet and smooth running centrifuge accommodates rotors for microtubes (24x1,5/2,0 ml), microplates and 15/50 ml conical tubes as well as a 16-place rotor for 5 ml tubes and a swing-bucket rotor for 6 blood collection tubes. Ideal for use in life science, biotechnology laboratories and clinical laboratories.

- Temperature range from –9 to +40 °C with pre-cooling function

- Max. speed: 31150×g (18000 rpm)
- Timer from 10 s to 99,5 minutes or continuous
- Saves up to 100 user-defined programs
- Automatic rotor recognition, imbalance detection and quick-spin function
- Refrigerant with low GWP and CO<sub>2</sub> emissions according to EU standards valid from 2020
- 6 different rotors available

The Micro Star 30R is available without rotor for free rotor selection or as a package which includes microtube rotor RA 24/2 with aerosol tight rotor lid.

|                                 |                               |
|---------------------------------|-------------------------------|
| Model                           | Micro Star 30R                |
| Temperature (°C)                | –9...+40                      |
| Max. capacity                   | 6x50 ml                       |
| Max. speed (min <sup>-1</sup> ) | 18000                         |
| Max. RCF (×g)                   | 31150                         |
| Timer                           | 10 s - 99,5 min or continuous |
| Noise level (dB(A))             | < 56                          |
| Power consumption (W)           | 700                           |
| WxDxH (mm)                      | 360x675x288                   |
| Weight (kg)                     | 51                            |

| Description                                                                    | Pk | Cat. No. |
|--------------------------------------------------------------------------------|----|----------|
| Microcentrifuge, refrigerated, Micro Star 30R with aerosol tight rotor RA 24/2 | 1  | 521-2574 |





### CENTRIFUGES, BENCH TOP, VENTILATED/REFRIGERATED, MEGA STAR 600 / 600R

These small bench top centrifuges are ideal for research and clinical applications in pharmaceutical and biotechnical industries, as well as for academic research. They offer good capacity in a compact design with a smart and simple interface.

- Auto-Lock® III rotor system: Tool-free rotor exchange system enables quick rotor exchange; with just the push of a button users can quickly change rotors and easily access the rotor chamber for cleaning
- Aerosol-tight ClickSeal® bucket caps and rotor lid sealing system: Glove friendly one handed open/close capability
- Time saving pulse function for short runs
- Highly visible backlit display for easy reading of parameters across the lab

Mega Star 600 centrifuges are available as a ventilated or a refrigerated version. The refrigerated version, with pre-cooling function, is suitable for temperature-sensitive sample processing with control between -10 and +40 °C.

Mega Star 600 / 600R are supplied with rotor TX-150, set of four round buckets and four ClickSeal® caps. The Mega Star 600R is also available in a package with MicroClick rotor incl. ClickSeal® biocontainment rotor lid. All packages come with two power cords (EU and UK plug). Adapters need to be ordered separately. Additional rotors are available on request.

|                                                        |                                                                                                       |
|--------------------------------------------------------|-------------------------------------------------------------------------------------------------------|
| <b>Model</b>                                           | Mega Star 600R                                                                                        |
| <b>Max. capacity - swing-out rotor</b>                 | 4x145 ml                                                                                              |
| <b>Max. speed - swing-out rotor (min<sup>-1</sup>)</b> | 4350 (with TX-150 rotor) / 17850 (with MicroClick rotor)                                              |
| <b>Max. RCF - swing-out rotor (xg)</b>                 | 3046 (with TX-150 rotor) / 30279 (with MicroClick rotor)                                              |
| <b>Temperature (°C)</b>                                | -10...+40                                                                                             |
| <b>Acceleration/braking ramps</b>                      | 2/2 (standard and soft)                                                                               |
| <b>Motor</b>                                           | Brushless induction motor                                                                             |
| <b>Control</b>                                         | Microprocessor                                                                                        |
| <b>Functions</b>                                       | Auto-Lock III rotor locking system, pre-cooling and CFC-free refrigeration, ClickSeal® sealing system |
| <b>Programs</b>                                        | 3 (direct access) + 96 additional (via folder)                                                        |

|                              |                                                              |
|------------------------------|--------------------------------------------------------------|
| <b>Timer</b>                 | 9 h 99 min 50 s + continuous                                 |
| <b>Anti-unbalance system</b> | Continuous vibration measurement, with rotor mass correction |
| <b>Display</b>               | Large, bright LCD                                            |
| <b>Languages</b>             | English, German, French, Spanish, Italian, Dutch and Russian |
| <b>Noise level (dB(A))</b>   | <56 (with TX-150 rotor) / <52 (with MicroClick rotor)        |
| <b>Power supply</b>          | 230 V / 50 - 60 Hz                                           |
| <b>Power consumption (W)</b> | 750                                                          |
| <b>WxDxH (mm)</b>            | 460x670x320                                                  |
| <b>Weight (kg)</b>           | 74 (centrifuge only)                                         |

| Description                                                                                                      | Pk | Cat. No. |
|------------------------------------------------------------------------------------------------------------------|----|----------|
| Refrigerated bench top centrifuge, Mega Star 600R, micro package incl. MicroClick rotor and ClickSeal® rotor lid | 1  | 521-1895 |



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Microcentrifuge tubes with socket screw-cap

### MICROCENTRIFUGE TUBES WITH SOCKET SCREW CAPS

These clear, high grade PP tubes are ideal for sample processing applications.

– RNase-, DNase- and endotoxin-free

Excellent for freezer storage or secure sample handling. Screw caps incorporate silicone O-rings for a leakproof seal and accept colour coded inserts. Inserts snap into the top of the cap and create a flush surface. Tubes are available with standard or loop caps, which tether the cap to the tube.

Caps and tubes are steam autoclavable at 121 °C and freezable to -80 °C.

Manufactured in a Class 100000 cleanroom environment

Manufactured under ISO 13485:2016 and ISO 9001:2015 quality management systems

Sterile tubes are sterilised by gamma irradiation SAL 10<sup>-6</sup> (ISO 11137).

| Capacity (ml)                                                   | Type                            | Colour  | Version                                    | RCF max. (xg) | Pk  | Cat. No. |
|-----------------------------------------------------------------|---------------------------------|---------|--------------------------------------------|---------------|-----|----------|
| <b>Tubes with green colour caps in separate resealable bags</b> |                                 |         |                                            |               |     |          |
| 0,5                                                             | With green screw cap            | Natural | Non graduated, conical bottom, non sterile | 20000         | 500 | 525-1231 |
| 0,5                                                             | With green screw cap            | Natural | Non graduated, freestanding, non sterile   | 20000         | 500 | 525-1233 |
| 1,5                                                             | With green screw cap            | Natural | Graduated, conical bottom, non sterile     | 20000         | 500 | 525-1236 |
| 1,5                                                             | With green screw cap            | Natural | Graduated, freestanding, non sterile       | 20000         | 500 | 525-1237 |
| 2,0                                                             | With green screw cap            | Natural | Graduated, conical bottom, non sterile     | 20000         | 500 | 525-1240 |
| 2,0                                                             | With green screw cap            | Natural | Graduated, freestanding, non sterile       | 20000         | 500 | 525-1241 |
| <b>Sterile tubes with attached natural colour caps</b>          |                                 |         |                                            |               |     |          |
| 0,5                                                             | With natural screw cap          | Natural | Non graduated, conical bottom, sterile     | 20000         | 500 | 525-0642 |
| 0,5                                                             | With natural screw cap          | Natural | Non graduated, freestanding, sterile       | 20000         | 500 | 525-0644 |
| 1,5                                                             | With natural screw cap          | Natural | Graduated, conical bottom, sterile         | 20000         | 500 | 525-0646 |
| 1,5                                                             | With natural screw cap          | Natural | Graduated, freestanding, sterile           | 20000         | 500 | 525-0648 |
| 2,0                                                             | With natural screw cap          | Natural | Graduated, conical bottom, sterile         | 20000         | 500 | 525-0650 |
| 2,0                                                             | With natural screw cap          | Natural | Graduated, freestanding, sterile           | 20000         | 500 | 525-0652 |
| <b>Tubes with green colour loop style caps</b>                  |                                 |         |                                            |               |     |          |
| 0,5                                                             | With green loop style screw cap | Natural | Non graduated, conical bottom, non sterile | 20000         | 500 | 525-1234 |
| 0,5                                                             | With green loop style screw cap | Natural | Non graduated, freestanding, non sterile   | 20000         | 500 | 525-1235 |
| 1,5                                                             | With green loop style screw cap | Natural | Graduated, conical bottom, non sterile     | 20000         | 500 | 525-1238 |
| 1,5                                                             | With green loop style screw cap | Natural | Graduated, freestanding, non sterile       | 20000         | 500 | 525-1239 |
| 2,0                                                             | With green loop style screw cap | Natural | Graduated, freestanding, non sterile       | 20000         | 500 | 525-1243 |
| 2,0                                                             | With green loop style screw cap | Natural | Graduated, conical bottom, non sterile     | 20000         | 500 | 525-1244 |



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Microcentrifuge tubes

## DISPOSABLE MICROCENTRIFUGE TUBES

These tubes are made from USP Class VI PP.

- Amber coloured for light-sensitive substances
- RNase-, DNase- and endotoxin-free
- Engraved graduations ensure accuracy
- Caps will not pop open during centrifuging
- Caps can be penetrated by a syringe

These tubes also feature flat, pierceable, frosted caps and a side labelling surface.

Autoclavable at 121 °C and freezable to -80 °C.

Manufactured in a Class 100 000 cleanroom environment

Manufactured under ISO 13485:2016 and ISO 9001:2015 quality management systems

Assorted pack contains 100 tubes each of red, orange, yellow, green and blue.

| Capacity (ml)       | Type              | Colour   | Version                                | RCF max. (xg) | Pk    | Cat. No. |
|---------------------|-------------------|----------|----------------------------------------|---------------|-------|----------|
| <b>0,5 ml tubes</b> |                   |          |                                        |               |       |          |
| 0,5                 | With attached cap | Natural  | Graduated, conical bottom, non sterile | 20000         | 1.000 | 525-1220 |
| 0,5                 | With attached cap | Amber    | Graduated, conical bottom, non sterile | 20000         | 1.000 | 525-1246 |
| 0,5                 | With attached cap | Assorted | Graduated, conical bottom, non sterile | 20000         | 1.000 | 525-1222 |
| 0,5                 | With attached cap | Blue     | Graduated, conical bottom, non sterile | 20000         | 1.000 | 525-1250 |
| 0,5                 | With attached cap | Green    | Graduated, conical bottom, non sterile | 20000         | 1.000 | 525-1251 |
| 0,5                 | With attached cap | Orange   | Graduated, conical bottom, non sterile | 20000         | 1.000 | 525-1248 |
| 0,5                 | With attached cap | Purple   | Graduated, conical bottom, non sterile | 20000         | 1.000 | 525-1249 |
| 0,5                 | With attached cap | Red      | Graduated, conical bottom, non sterile | 20000         | 1.000 | 525-1221 |
| 0,5                 | With attached cap | Yellow   | Graduated, conical bottom, non sterile | 20000         | 1.000 | 525-1247 |
| <b>1,5 ml tubes</b> |                   |          |                                        |               |       |          |
| 1,5                 | With attached cap | Natural  | Graduated, conical bottom, non sterile | 20000         | 500   | 525-1126 |
| 1,5                 | With attached cap | Natural  | Graduated, conical bottom, sterile     | 20000         | 500   | 525-1178 |
| 1,5                 | With attached cap | Amber    | Graduated, conical bottom, non sterile | 20000         | 500   | 525-1223 |
| 1,5                 | With attached cap | Assorted | Graduated, conical bottom, non sterile | 20000         | 500   | 525-1230 |
| 1,5                 | With attached cap | Blue     | Graduated, conical bottom, non sterile | 20000         | 500   | 525-1228 |
| 1,5                 | With attached cap | Green    | Graduated, conical bottom, non sterile | 20000         | 500   | 525-1229 |
| 1,5                 | With attached cap | Orange   | Graduated, conical bottom, non sterile | 20000         | 500   | 525-1225 |
| 1,5                 | With attached cap | Purple   | Graduated, conical bottom, non sterile | 20000         | 500   | 525-1227 |
| 1,5                 | With attached cap | Red      | Graduated, conical bottom, non sterile | 20000         | 500   | 525-1226 |
| 1,5                 | With attached cap | Yellow   | Graduated, conical bottom, non sterile | 20000         | 500   | 525-1224 |
| <b>2,0 ml tubes</b> |                   |          |                                        |               |       |          |
| 2,0                 | With attached cap | Natural  | Graduated, conical bottom, non sterile | 20000         | 500   | 525-1136 |
| 2,0                 | With attached cap | Amber    | Graduated, conical bottom, non sterile | 20000         | 500   | 525-1127 |
| 2,0                 | With attached cap | Assorted | Graduated, conical bottom, non sterile | 20000         | 500   | 525-1135 |
| 2,0                 | With attached cap | Blue     | Graduated, conical bottom, non sterile | 20000         | 500   | 525-1133 |
| 2,0                 | With attached cap | Green    | Graduated, conical bottom, non sterile | 20000         | 500   | 525-1134 |
| 2,0                 | With attached cap | Orange   | Graduated, conical bottom, non sterile | 20000         | 500   | 525-1129 |
| 2,0                 | With attached cap | Purple   | Graduated, conical bottom, non sterile | 20000         | 500   | 525-1131 |
| 2,0                 | With attached cap | Red      | Graduated, conical bottom, non sterile | 20000         | 500   | 525-1130 |
| 2,0                 | With attached cap | Yellow   | Graduated, conical bottom, non sterile | 20000         | 500   | 525-1128 |



Microcentrifuge tubes

### MICROCENRIFUGE TUBES WITH FLAT SCREW CAPS

These tubes are made from ultra-clear USP Class VI PP that allows easy viewing of contents.

- RNase-, DNase- and endotoxin-free
- Engraved graduations ensure accuracy
- Fit most common rotors
- Smooth surface for applying labels

These tubes feature universal screw threads for use with most popular brand screw caps. Low profile caps include an ethylene propylene O-ring, ensuring a leakproof seal.

Tubes and caps are autoclavable at 121 °C and freezable to -80 °C.

Manufactured in a Class 100 000 cleanroom environment

Manufactured under ISO 13485:2016 and ISO 9001:2015 quality management systems

Sterile tubes are radiation sterilised SAL 10<sup>-6</sup> (ISO 11137). Certificate available for every lot.

Tubes are packed 500 per bag. Assorted pack of caps (525-1187) contains equal quantities of red, orange, yellow, blue and green.

| Capacity (ml)                                                                                 | Type                   | Colour  | Version                                | RCF max. (×g) | Pk  | Cat. No. |
|-----------------------------------------------------------------------------------------------|------------------------|---------|----------------------------------------|---------------|-----|----------|
| <b>Non sterile microcentrifuge tubes with natural colour caps in separate resealable bags</b> |                        |         |                                        |               |     |          |
| 0,5                                                                                           | With natural screw cap | Natural | Graduated, conical bottom, non sterile | 20000         | 500 | 525-1144 |
| 0,5                                                                                           | With natural screw cap | Natural | Graduated, freestanding, non sterile   | 20000         | 500 | 525-1157 |
| 1,5                                                                                           | With natural screw cap | Natural | Graduated, conical bottom, non sterile | 20000         | 500 | 525-1145 |
| 1,5                                                                                           | With natural screw cap | Natural | Graduated, freestanding, non sterile   | 20000         | 500 | 525-1158 |
| 2,0                                                                                           | With natural screw cap | Natural | Graduated, conical bottom, non sterile | 20000         | 500 | 525-1146 |
| 2,0                                                                                           | With natural screw cap | Natural | Graduated, freestanding, non sterile   | 20000         | 500 | 525-1160 |
| <b>Sterile microcentrifuge tubes with natural colour caps attached</b>                        |                        |         |                                        |               |     |          |
| 0,5                                                                                           | With natural screw cap | Natural | Graduated, conical bottom, sterile     | 20000         | 500 | 525-1140 |
| 0,5                                                                                           | With natural screw cap | Natural | Graduated, freestanding, sterile       | 20000         | 500 | 525-1155 |
| 1,5                                                                                           | With natural screw cap | Natural | Graduated, conical bottom, sterile     | 20000         | 500 | 525-1141 |
| 1,5                                                                                           | With natural screw cap | Natural | Graduated, freestanding, sterile       | 20000         | 500 | 525-1159 |
| 2,0                                                                                           | With natural screw cap | Natural | Graduated, conical bottom, sterile     | 20000         | 500 | 525-1143 |
| 2,0                                                                                           | With natural screw cap | Natural | Graduated, freestanding, sterile       | 20000         | 500 | 525-1156 |
| <b>Microcentrifuge tubes only</b>                                                             |                        |         |                                        |               |     |          |
| 0,5                                                                                           | Without cap            | Natural | Graduated, conical bottom, non sterile | 20000         | 500 | 525-1137 |
| 0,5                                                                                           | Without cap            | Natural | Graduated, freestanding, non sterile   | 20000         | 500 | 525-1147 |
| 1,5                                                                                           | Without cap            | Natural | Graduated, conical bottom, non sterile | 20000         | 500 | 525-1138 |
| 1,5                                                                                           | Without cap            | Natural | Graduated, freestanding, non sterile   | 20000         | 500 | 525-1148 |
| 2,0                                                                                           | Without cap            | Natural | Graduated, conical bottom, non sterile | 20000         | 500 | 525-1139 |
| 2,0                                                                                           | Without cap            | Natural | Graduated, freestanding, non sterile   | 20000         | 500 | 525-1149 |

| Colour                                           | Pk  | Cat. No. |
|--------------------------------------------------|-----|----------|
| <b>Flat screw caps for microcentrifuge tubes</b> |     |          |
| Assorted                                         | 500 | 525-1187 |
| Blue                                             | 500 | 525-1180 |
| Green                                            | 500 | 525-1179 |
| Natural                                          | 500 | 525-1186 |
| Orange                                           | 500 | 525-1183 |
| Purple                                           | 500 | 525-1181 |
| Red                                              | 500 | 525-1182 |
| White                                            | 500 | 525-1185 |
| Yellow                                           | 500 | 525-1184 |



Microcentrifuge tubes

MICROCENTRIFUGE TUBES, HIGH PERFORMANCE

These tubes are made from USP Class VI PP, which ensures a clear view of the pellet. They incorporate a high strength wall, and can be centrifuged to twice the g-force that most other microcentrifuge tubes can withstand.

- Amber coloured for light-sensitive substances
- Ideal for vortexing and shaking tables
- RNase-, DNase- and endotoxin-free
- Engraved graduations ensure accuracy
- Fit all common rotors
- Ideal for phenol/chloroform extractions

These tubes also feature flat, pierceable, frosted caps and a side labelling surface. The ergonomically designed caps, with smooth surfaces, help reduce the potential for repetitive strain injuries.

Steam autoclavable at 121 °C and freezable to -80 °C.

Manufactured in a Class 100 000 cleanroom environment

Manufactured under ISO 13485:2016 and ISO 9001:2015 quality management systems

Assorted pack contains 100 tubes each of green, blue, red, orange and yellow in separate bags.

Because tubes have a tightly fitting cap, they should not be used for boiling.

| Capacity (ml) | Type              | Colour   | Version                                | RCF max. (xg) | Pk    | Cat. No. |
|---------------|-------------------|----------|----------------------------------------|---------------|-------|----------|
| 0,5 ml tubes  |                   |          |                                        |               |       |          |
| 0,5           | With attached lid | Natural  | Graduated, conical bottom, non sterile | 35000         | 1.000 | 525-1172 |
| 0,5           | With attached lid | Assorted | Graduated, conical bottom, non sterile | 35000         | 1.000 | 525-1170 |
| 0,5           | With attached lid | Blue     | Graduated, conical bottom, non sterile | 35000         | 1.000 | 525-1171 |
| 0,5           | With attached lid | Green    | Graduated, conical bottom, non sterile | 35000         | 1.000 | 525-1177 |
| 0,5           | With attached lid | Orange   | Graduated, conical bottom, non sterile | 35000         | 1.000 | 525-1173 |
| 0,5           | With attached lid | Purple   | Graduated, conical bottom, non sterile | 35000         | 1.000 | 525-1174 |
| 0,5           | With attached lid | Red      | Graduated, conical bottom, non sterile | 35000         | 1.000 | 525-1175 |
| 0,5           | With attached lid | Yellow   | Graduated, conical bottom, non sterile | 35000         | 1.000 | 525-1176 |
| 1,5 ml tubes  |                   |          |                                        |               |       |          |
| 1,5           | With attached lid | Natural  | Graduated, conical bottom, non sterile | 40000         | 500   | 525-1164 |
| 1,5           | With attached lid | Amber    | Graduated, conical bottom, non sterile | 40000         | 500   | 525-1161 |
| 1,5           | With attached lid | Assorted | Graduated, conical bottom, non sterile | 40000         | 500   | 525-1167 |
| 1,5           | With attached lid | Blue     | Graduated, conical bottom, non sterile | 40000         | 500   | 525-1162 |
| 1,5           | With attached lid | Green    | Graduated, conical bottom, non sterile | 40000         | 500   | 525-1163 |
| 1,5           | With attached lid | Orange   | Graduated, conical bottom, non sterile | 40000         | 500   | 525-1165 |
| 1,5           | With attached lid | Purple   | Graduated, conical bottom, non sterile | 40000         | 500   | 525-1166 |
| 1,5           | With attached lid | Red      | Graduated, conical bottom, non sterile | 40000         | 500   | 525-1168 |
| 1,5           | With attached lid | Yellow   | Graduated, conical bottom, non sterile | 40000         | 500   | 525-1169 |



DEEP WELL PLATES, 96 ROUND WELL

Made of virgin PP to minimise extractables.

- Raised rim to prevent cross contamination and enable a better heat-welded seal
- Also available rimless to allow insertion of vials, or when adhesive seals are used
- Free from DNase and RNase
- Round bottom for optimal mixing and recovery
- Suitable for use with automated sample handling systems
- Can be stored at -80 °C

| Description                                | Colour | Sterile | Packed           | Well volume (ml) | Pk | Cat. No. |
|--------------------------------------------|--------|---------|------------------|------------------|----|----------|
| Deep well plate, 96 round well, raised rim | Clear  | -       | 5 per inner pack | 1,0              | 50 | 732-3322 |
| Deep well plate, 96 round well, raised rim | Clear  | +       | 5 per inner pack | 1,0              | 50 | 732-3324 |
| Deep well plate, 96 round well, rimless    | Clear  | -       | 5 per inner pack | 1,0              | 50 | 732-3328 |
| Deep well plate, 96 round well, rimless    | Clear  | -       | 5 per inner pack | 2,0              | 50 | 732-3329 |
| Deep well plate, 96 round well, rimless    | Clear  | +       | 5 per inner pack | 2,0              | 50 | 732-3330 |



DEEP WELL PLATES, 384 SQUARE WELL

These deep 384 square well plates are made from PP in a Class 100 000 cleanroom. They are designed for high density sample collection and/or storage.

- Height 30 mm
- Free from DNase and RNase
- Manufactured to ANSI/SLAS specifications
- Can be stored at -80 °C

384-Well deep well microplates, square

| Description                      | Colour | Sterile | Packed           | Well volume | Pk | Cat. No. |
|----------------------------------|--------|---------|------------------|-------------|----|----------|
| Deep well plate, 384 square well | Clear  | -       | 6 per inner pack | 300 µl      | 48 | 732-3326 |
| Deep well plate, 384 square well | Clear  | +       | 6 per inner pack | 300 µl      | 48 | 732-3327 |



# Setting science in motion to create a better world



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