

PCR DNA Ladder



Cat. No.: 733-2579

Cat. No.	Product	ID No.	Cap colour	Volume
733-2579	PCR Range DNA Ladder	5401300	Black	1 x 0.5 ml

Store at -20 °C

Key Features

- Molecular range from 100 bp to 3000 bp
- Extra bright 1000 bp band serves as reference point
- Mass calibrated bands for DNA quantitation
- Convenient ready-to-use formulation
- 250 lanes of 2 µl

General Description

PCR DNA Ladder is a broad range dsDNA ladder with bands from 100 bp to 3000 bp (figure 1). The ladder can be used to quantitate the amount of DNA in a sample since the mass of DNA in each band in the ladder has been calibrated to 10 ng DNA except the 1000 bp band, which contains 30 ng DNA. The 1000 bp band is thus more intense and an easy to identify reference point. The 100 bp band may appear faint due to diffusion during electrophoresis.

The ladder is supplied in loading buffer, ready-to-use on agarose and polyacrylamide gels. It is suitable with TBE TAE, SB and LB electrophoresis systems. Each DNA ladder is supplied in 0.5 ml packs sufficient for 250 lanes.

Suggestions for use of PCR DNA Ladder

- **Important:** Mix and vortex ladder briefly before use. Do not heat the ladder.
- Load 1-5 µl of ladder per lane (for gel wells of ~5 – 10 mm width)
- Agarose gel electrophoresis: Prepare 1% gel. The dye should migrate 60 – 70% the length of the gel.
- Polyacrylamide gel electrophoresis: Prepare 8% gel. The dye should migrate approx. 90% the length of the gel.
- Ethidium bromide (0.5 µg/ml) is the recommended gel stain.

Storage, Stability and Shipment

PCR DNA ladder may be kept safely at room temperature for at least 3 months from date of shipment. Ladders are guaranteed for 12 months when stored at 4°C. Aliquot product if necessary to avoid repeated freezing and thawing cycles.

Shipped at ambient temperature.

Quality control

Agarose gel analysis shows that all bands are present at the expected location and band intensity.

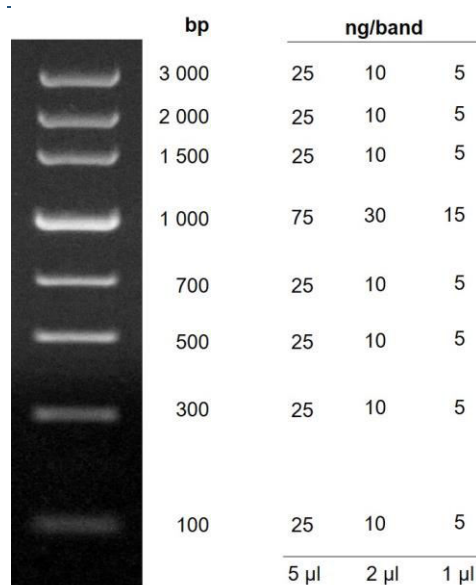


Figure 1: PCR DNA Ladder. 2 µl PCR DNA Ladder was loaded on a 1% agarose in 1x TAE and stained with ethidium bromide.

Related Products

Description	Cat. No.
VWR Taq DNA Polymerase	
VWR Glycerol Free Taq DNA Polymerase (1000 units) with 10x Key Buffer with 10x Extra Buffer	733-1817
VWR Taq DNA Polymerase (500 units) with 10x Key Buffer with 10x Extra Buffer	733-1301
VWR Taq DNA Polymerase (500 units) with 10x Extra Buffer (Mg ²⁺ -free and Triton-free)	733-1304
VWR Taq DNA Polymerase (1000 units) with 10x Key Buffer (Tween-free) with 10x Extra Buffer (Triton-free)	733-1307
VWR Taq DNA Polymerase (500 units) with 10x Key Buffer (Mg ²⁺ free)	733-1311
VWR Red Taq DNA Polymerase (2500 units) with 10x Key Buffer with 10x Extra Buffer	733-1323
VWR Taq DNA Polymerase Master Mix*	
VWR Taq DNA Pol. 1.1x Master Mix, 1.5 mM MgCl ₂ final conc. (2500 reactions)	733-1314
VWR Taq DNA Pol. 2x Master Mix, 1.5 mM MgCl ₂ final conc. (2500 reactions)	733-1316
VWR Red Taq DNA Pol. 1.1x Master Mix, 1.5 mM MgCl ₂ final conc. (2500 reactions)	733-1318
VWR Red Taq DNA Pol. 2x Master Mix, 1.5 mM MgCl ₂ final conc. (2500 reactions)	733-1320
VWR TEMPase DNA Polymerase	
VWR TEMPase Hot Start DNA Polymerase (500 units) with 10x Key Buffer with 10x Combination Buffer	733-1331
VWR Glycerol Free TEMPase DNA Polymerase (500 units) with 10x Key Buffer	733-2555

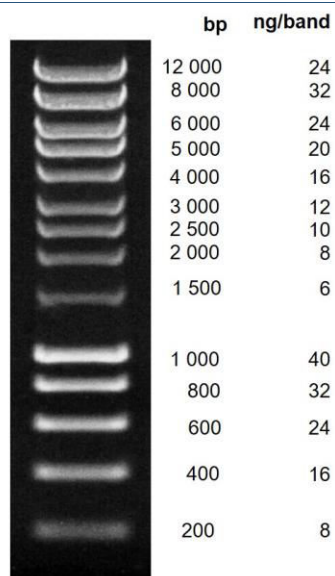
VWR TEMPase Hot Start Master Mix**	
VWR TEMPase Hot Start 2x Master Mix K, 1.5 mM MgCl ₂ final conc. (2500 reactions)	733-2582
VWR Blue TEMPase Hot Start 2x Master Mix K, 1.5 mM MgCl ₂ final conc. (2500 reactions)	733-2585
VWR Multiplex Master Mix	
VWR Multiplex 2x Master Mix, (2500 reactions)	733-2569
VWR High Fidelity DNA Polymerase	
VWR AccuPOL DNA Polymerase (250 units) with 10x Key Buffer	733-1324
VWR AccuPOL DNA Polymerase (250 units) with 10x Key Buffer (Mg ²⁺ free and Tween free)	733-1328
VWR PCR accessories	
Betaine Enhancer Solution (5M), 5 ml (500 reactions)	733-1361
dNTP Mix, 40 mM (10 mM of each dATP, dCTP, dGTP & dTTP) (40 µmol, 2x 500 µl)	733-1363
dNTP Set, 100 mM of each dATP, dCTP, dGTP & dTTP (4x 25 µmol, 4x 250 µl)	733-1364
VWR PCR grade water (6 x 5 ml)	733-2573
VWR Loading Buffer Red (5 x 1 ml) – available in 4 different colors	733-2574

*Also available with 2 mM MgCl₂

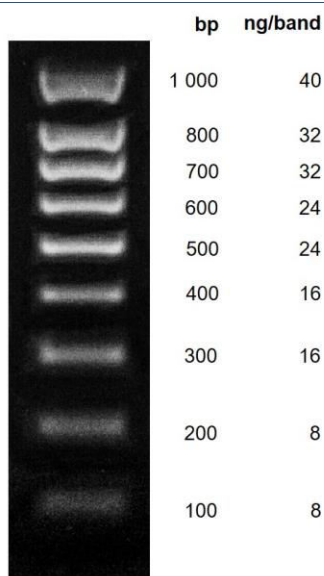
**Also available as 2 x Master Mix C based on Combination Buffer

Tween® 20 is a registered trademark of ICI Americas, Inc.

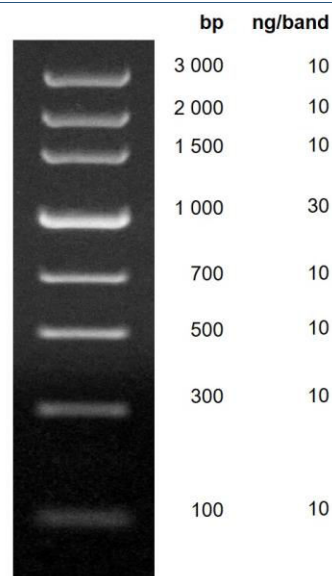
The VWR DNA Ladders



High Range DNA Ladder



Low Range DNA Ladder



PCR DNA Ladder