

## PCR Ladder

100 – 3000 bp



**Cat. No.: 733-2603**

| Cat. No. | Product    | ID No.  | Cap colour | Volume     |
|----------|------------|---------|------------|------------|
| 733-2603 | PCR Ladder | 5401700 | Black      | 1 x 0.5 ml |

Store at -20 °C

### Key Features

- Molecular range from 100 bp to 3000 bp
- Convenient ready-to-use formulation
- 100 lanes of 5 µl

### General Description

PCR Ladder is a dsDNA ladder with bands from 100 bp to 3000 bp (figure 1).

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.

### Suggestions for use of PCR Ladder

- **Important:** Mix and vortex ladder briefly before use. Do not heat the ladder.
- Load 5 µl of ladder per lane (for gel wells of ~5 – 10 mm width)
- Agarose gel electrophoresis: Prepare 1 – 2 % 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 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 or on dry ice. For long term storage, keep the PCR Ladder at -20 °C for up to 3 years.

### Quality control

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

|  | bp      | ng/band |
|--|---------|---------|
|  | - 3 000 | 5       |
|  | - 1 500 | 5       |
|  | - 1 000 | 5       |
|  | - 700   | 12      |
|  | - 500   | 6       |
|  | - 300   | 6       |
|  | - 100   | 6       |

**Figure 1: PCR Ladder.** 5 µl PCR Ladder was loaded on a 1.6 % agarose in 1x TAE and stained with ethidium bromide. Estimated concentrations of the DNA bands are indicated.

## Related Products

| Description                                                                                              | Cat. No.        |
|----------------------------------------------------------------------------------------------------------|-----------------|
| <b>VWR Taq DNA Polymerase</b>                                                                            |                 |
| VWR Taq DNA Polymerase (500 units) with 10x Key Buffer with 10x Extra Buffer                             | <b>733-1301</b> |
| VWR Taq DNA Polymerase (500 units) with 10x Extra Buffer (Mg <sup>2+</sup> -free and Triton-free)        | <b>733-1304</b> |
| VWR Taq DNA Polymerase (1000 units) with 10x Key Buffer (Tween-free) with 10x Extra Buffer (Triton-free) | <b>733-1307</b> |
| VWR Taq DNA Polymerase (500 units) with 10x Key Buffer (Mg <sup>2+</sup> free)                           | <b>733-1311</b> |
| VWR Red Taq DNA Polymerase (2500 units) with 10x Key Buffer with 10x Extra Buffer                        | <b>733-1323</b> |
| VWR Glycerol Free Taq DNA Polymerase (1000 units) with 10x Key Buffer with 10x Extra Buffer              | <b>733-1817</b> |
| <b>VWR Taq DNA Polymerase Master Mix*</b>                                                                |                 |
| VWR Taq Plus 2x Master Mix, 1.5 mM MgCl <sub>2</sub> final conc. (2500 reactions)                        | <b>733-2599</b> |
| VWR Taq DNA Pol. 1.1x Master Mix, 1.5 mM MgCl <sub>2</sub> final conc. (2500 reactions)                  | <b>733-1314</b> |
| VWR Taq DNA Pol. 2x Master Mix, 1.5 mM MgCl <sub>2</sub> final conc. (2500 reactions)                    | <b>733-1316</b> |
| VWR Red Taq DNA Pol. 1.1x Master Mix, 1.5 mM MgCl <sub>2</sub> final conc. (2500 reactions)              | <b>733-1318</b> |
| VWR Red Taq DNA Pol. 2x Master Mix, 1.5 mM MgCl <sub>2</sub> final conc. (2500 reactions)                | <b>733-1320</b> |
| <b>VWR TEMPase DNA Polymerase</b>                                                                        |                 |
| VWR TEMPase Hot Start DNA Polymerase (500 units) with 10x Key Buffer with 10x Combination Buffer         | <b>733-1331</b> |
| VWR Glycerol Free TEMPase DNA Polymerase (500 units) with 10x Key Buffer                                 | <b>733-2555</b> |

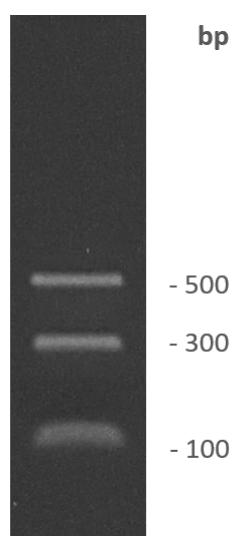
|                                                                                                   |                 |
|---------------------------------------------------------------------------------------------------|-----------------|
| <b>VWR TEMPase Hot Start Master Mix**</b>                 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

\*Also available with 2 mM MgCl<sub>2</sub>

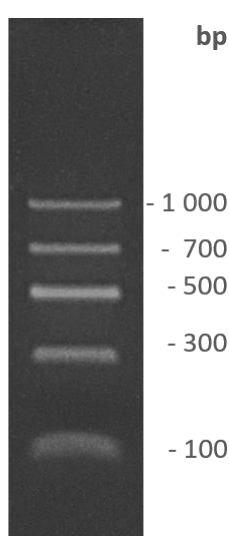
\*\*Also available as 2 x Master Mix C based on Combination Buffer

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

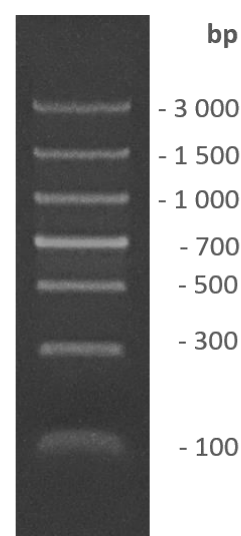
## The VWR DNA Ladders



**Mini DNA Ladder**



**Low DNA Ladder**



**PCR Ladder**