

# Low Range DNA Ladder

Range: 100 bp – 1000 bp

Cat. No.: A610241

250 lanes of 2 μl

-	Low Range DNA Ladder
ID No.	5401200
Cap colour	Black
Content	1 x 0.5 ml

A610241

## **Features and General Description**

Low Range DNA Ladder is a broad range dsDNA ladder with bands from 100 bp to 1000 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 range from 8 to 40 ng DNA.

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 Low Range DNA Ladder

- Important: Mix ladder briefly before use. Do not heat the ladder.
- Load 1 µl to 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

Low Range 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. For long term storage, keep the loading buffer at -20  $^\circ C$  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	1
	1 000	100	40	20
Contract	800	80	32	16
and a second	700	80	32	16
	600	60	24	12
-	500	60	24	12
	400	40	16	8
	300	40	16	8
1000000	200	20	8	4
	100	20	8	4
le an an and		5 µl	2 µl	1 µl

Figure 1: Low Range DNA Ladder. 2  $\mu$ I Low Range DNA Ladder was loaded on a 1% agarose in 1x TAE and stained with ethidium bromide.

### **Related Products**

DNA Ladders	Cat. No.
High Range DNA Ladder: 200 -12 000 bp. 250 lanes	A610141
PCR DNA Ladder: 100 -3000 bp. 250 lanes	A610341
Iqon Mini DNA Ladder: 100 -500 bp. 100 lanes	A610441
Iqon Low DNA Ladder: 100 -1000 bp. 100 lanes	A610541
Iqon PCR Ladder: 100 -3000 bp. 100 lanes	A610641

Loading Buffers	Cat. No.
5x Loading Buffer Red, 5 x 1 ml	A608104
5x Loading Buffer Blue, 5 x 1 ml	A608204
5x Loading Buffer Orange, 5 x 1 ml	A608304
5x Loading Buffer Cyan, 5 x 1 ml	A608404

Ultrapure dNTPs*	Cat. No.		
dNTP Mix 40 mM (2 x 500 µl): 10 mM each dA, dC, dG, dT	A502004		
dNTP Set, 100 mM each: 250 µl of each dA, dC, dG and dT	A511104		
*Other concentrations and Single dNTPs are available.			

PCR Grade Water	Cat. No.
6 x 5 ml	A360056
AQ90 High Fidelity DNA Polymerase 2 U/μl*	Cat. No.
With 10x AQ90 Buffer – 500 U	A457403
* Available in different size ranges.	
Taq Polymerase (500 units) *	Cat. No.
Taq DNA Polymerase 5 U/μl	A110003

Hot Start Polymerase (500 units) *	Cat. No.
TEMPase Hot Start DNA Polymerase, 5 U/μl	A220003
with 10x Ammonium Buffer	A221103

\*Available in kits including one or two buffers (Ammonium Buffer, Standard Buffer or Combination Buffer). Available in different size ranges.

AQ90 High Fidelity DNA Polymerase 2x Master Mix*	Cat. No.
100 reactions	A470701
* Available in different size ranges.	

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Taq Master Mixes (500 x 50 μl reactions) *	Cat. No.
2x Master Mix, 1.5 mM $MgCl_2$ final concentration	A140303
2x Master Mix RED, 1.5 mM MgCl <sub>2</sub> final concentration	A180303
TEMPase Hot Start Master Mixes (500 x 50 $\mu l$ reactions) *	Cat. No.
2x Master Mix A**, 1.5 mM MgCl <sub>2</sub> final concentration	A230303
2x Master Mix A**BLUE, 1.5 mM MgCl <sub>2</sub> final concentration	A290403

\*Master mixes available also in 1.1x variants as well as 2 mM MgCl<sub>2</sub> variants, \*\*Mix A is Ammonium Buffer based, also available as Mix C based on Combination Buffer. Available in different size ranges

Cat. No.
A313402
A314402
A315402
A323402
A324402
A325402

For Research Use Only. Not for use in diagnostics procedures.

Other product sizes, combinations and customized solutions are available. Please look at www.ampliqon.com or ask for our complete product list for PCR Enzymes. For customized solutions please contact us.

#### Made in Denmark

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ng/band	bp	ng/band	bp	ng/band
24	1 000	40	3 000	10
32	Summer and		2 000	10
24 20	800	32	1 500	10
16	700	32		
12	600	24	1 000	30
10 8	500	24		
6			700	10
0	400	16		10
10	300	16	500	10
40 32	300	10		
	and the second second		300	10
24	200	8		
16	Sector Sector			
	100	8	100	10
8				

High Range DNA Ladder

Low Range DNA Ladder

A111103

**PCR DNA Ladder** 

# The Ampliqon DNA Ladders

bp

200

• with 10x Ammonium Buffer