

Clean bands. Clear results.

GeneRuler DNA Ladders are designed to deliver precision and ease-of-use for everyday electrophoresis

Why use GeneRuler ladders?

Thermo Scientific™ GeneRuler™ DNA Ladders are ideal for sizing and approximate quantification of a wide range of double-stranded DNA and are available in fragment sizes ranging from 10 bp to 48.5 kb.

Why use O'GeneRuler ladders?

Thermo Scientific™ O'GeneRuler™ DNA Ladders are a ready-to-use

version of GeneRuler ladders that are premixed with 6X Orange DNA Loading Dye, containing xylene cyanol FF and orange G. They are ideal for visualization of small DNA fragments.

Why choose ready-to-use ladders?

Ready-to-use ladders offer convenience as they are premixed with 6X DNA loading dye.

Two versions are available:

- Loading dye containing bromophenol blue and xylene cyanol FF
- Loading dye containing xylene cyanol FF and orange G

Features

More environmentally friendly manufacturing without the use of organic solvents.

- Conventional and ready-to-use formats
- Wide range of ladders available (1 kb, 100 bp, 50 bp, low and high range)
- Sharp and bright reference bands
- Supplied with loading dye for sample DNA
- Ambient shipment

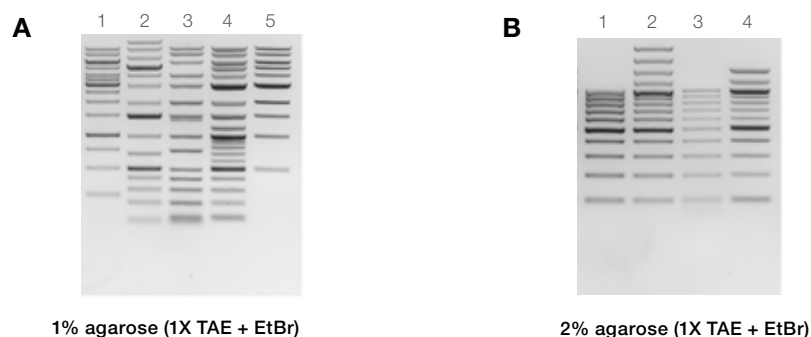


Figure 1. GeneRuler DNA Ladders provide sharp and bright reference bands, with an easy-to-remember pattern. Amount of DNA ladder per lane was loaded according to each manufacturer's recommendation. Thermo Scientific: A1. GeneRuler™ 1 kb DNA Ladder, ready-to-use, A2. GeneRuler™ 1 kb Plus DNA Ladder, ready-to-use; Sigma-Aldrich: A3. DirectLoad™ Wide Range DNA Marker; NEB: A4. Quick-Load™ 2-Log DNA Ladder (0.1–10.0 kb), A5. Quick-Load™ 1 kb DNA Ladder; Thermo Scientific: B1. GeneRuler™ 100 bp DNA Ladder, ready-to-use, B2. GeneRuler™ 100 bp Plus DNA Ladder, ready-to-use; Sigma-Aldrich: B3. DirectLoad™ PCR 100 bp Low Ladder; NEB: B4. Quick-Load™ Purple 100 bp DNA Ladder

Technical details

- Mixture of chromatography-purified individual DNA fragments
- Concentration of each DNA band is determined spectrophotometrically
- Ready-to-use DNA ladders are stable at room temperature for up to 6 months

Usage and applications

For sizing and approximate quantification in traditional molecular biology techniques:

- DNA cloning
- PCR
- Reverse transcription

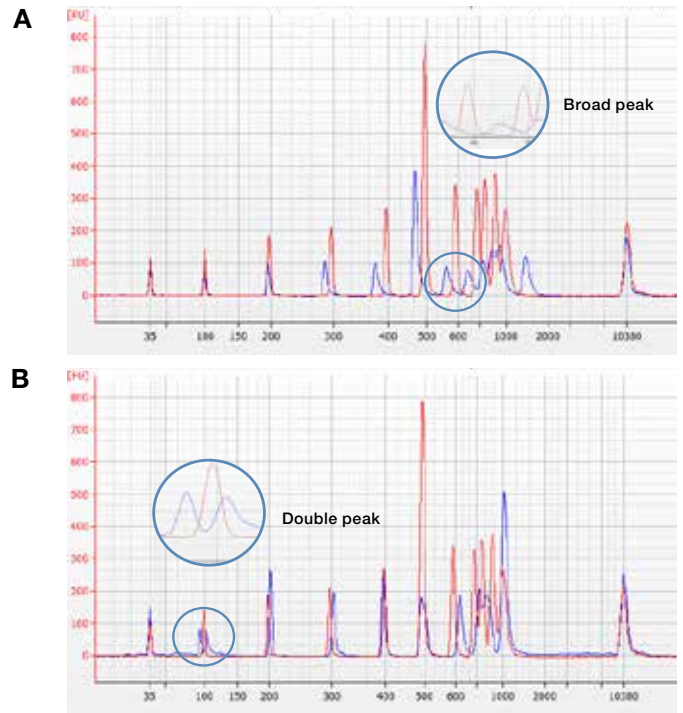


Figure 2. The GeneRuler DNA ladders can offer sharp peaks during capillary electrophoresis, for exceptional purity of DNA fragments without additional DNA fragments or dNTPs. (A) Thermo Scientific™ GeneRuler™ 100 bp DNA Ladder (red) and Promega 100 bp DNA Ladder (blue). **(B)** GeneRuler 100 bp DNA Ladder (red) and DirectLoad PCR 100 bp Low Ladder (blue).

Ordering information

Product	Quantity	GeneRuler Cat. No.	O'GeneRuler Cat. No.
100 bp DNA Ladder	50 µg/5 x 50 µg	SM0241/SM0242	
100 bp DNA Ladder, ready-to-use	50 µg/5 x 50 µg	SM0243/SM0244	SM1143*
100 bp Plus DNA Ladder	50 µg	SM0321/SM0322	
100 bp Plus DNA Ladder, ready-to-use	50 µg/5 x 50 µg	SM0323/SM0324	SM1153*
1 kb DNA Ladder	50 µg/25 x 50 µg	SM0311/SM0312	
1 kb DNA Ladder, ready-to-use	50 µg/5 x 50 µg	SM0314/SM0313	SM1163**
1 kb Plus DNA Ladder	50 µg/25 x 50 µg	SM1331/SM1332	
1 kb Plus DNA Ladder, ready-to-use	50 µg/5 x 50 µg	SM1334/SM1333	SM1343**
50 bp DNA Ladder	50 µg/5 x 50 µg	SM0371/SM0372	
50 bp DNA Ladder, ready-to-use	50 µg	SM0373	SM1133
DNA Ladder Mix	5 x 50 µg/25 x 50 µg	SM0331/SM0332	
DNA Ladder Mix, ready-to-use	50 µg/5 x 50 µg	SM0334/SM0333	SM1173**
Express DNA Ladder, ready-to-use	50 µg	SM1553	
Ultra Low Range DNA Ladder, ready-to-use†	50 µg	SM1213	SM1223
Low Range DNA Ladder, ready-to-use†	50 µg	SM1193	SM1203
High Range DNA Ladder, ready-to-use†	50 µg	SM1353	

* Available in quantity of 50 µg only.

** Available in quantity of 5 x 50 µg only.

† Also available in conventional format.

Find out more at thermofisher.com/generuler

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