Check the product label for actual catalog number, lot and expiry date.

Take5™ HR DNA Ladder

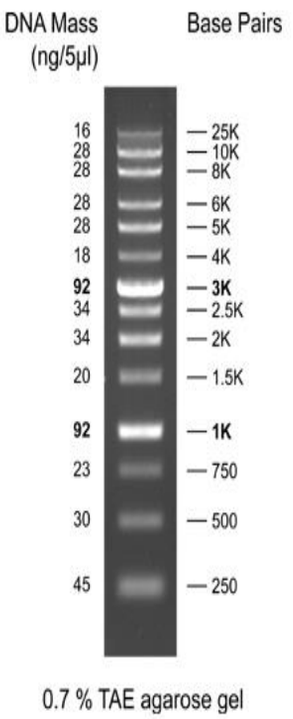
CAT.#	SIZE	COMPONENTS	COMPONENT COMPOSITION
DNL0402	200 appl.	2 x 0.5 ml - Take5™ HR DNA Ladder 2 x 1 ml - Take5™ Loading Dye, 6X	Ready to load ladder contains highly purified PCR products combined with plasmid digests, supplied in 1x loading dye: 10 mM Tris-HCl (pH 8.0) 10 mM EDTA, glycerol and tracking dyes. 6X Take5™ Loading Dye includes 10 mM Tris-HCl (pH 8.0) 60 mM EDTA, glycerol and three tracking dyes (Xylene cyanol FF, Bromophenol blue, Orange G).

APPLICATIONS

- DNA size determination and approximate DNA quantification on agarose gels

BENEFITS

- Room-temperature-stable, always ready to be used
- Sharp bands, bright reference bands, indicated DNA mass
- Take5™ ladders are supplied with loading dye for DNA samples



0.7 % TAE agarose gel

Take5™ HR DNA Ladder

250 bp- 25 kb Range
1 & 3 kb Reference
14 Bands
104 ng/µl Concentration
Ready-to-use
Tracking Dyes in the ladder with approximate migration reference in 1% agarose:

Xylene cyanol FF (~4 kb)
Bromophenol blue (~0.4 kb)

Tracking Dyes present in the Take5™ Loading Dye:

Xylene cyanol FF (~4 kb)
Bromophenol blue (~0.4 kb)
Orange G (<50 bp)

STORE

Room temp., 6 months
+4°C, 12 months / -20°C, 24 months
The storage recommendations are just guidelines, the expiry date shall be followed.

IN VITRO RESEARCH USE ONLY

PROTOCOL

The DNA Ladder is ready–to-use and designed for standard agarose electrophoresis and ethidium bromide or similar (GelRed, SybrGreen I) sensitivity dyes staining followed by UV detection.

To load a Ladder, mix it well and load following volume on the agarose gel, depending on the well size:

- For standard 5 mm size gel wells, use 5 µl of the ladder.
- For larger gel slots, use 1 µl per each millimeter of the slot width.

If you use more sensitive staining techniques than ethidium bromide, reduce the amount of the ladder at least 2X. You can use a 6:1 mixture of 1X TE buffer : 6X loading dye to dilute the ladder for an immediate use, if necessary.

To load a Sample DNA, use the supplied 6X loading dye:

- Always mix 1 volume of the loading dye with 5 volumes of the sample DNA stored in water or TE buffer. Use approximately 5 - 7 µl of this sample-dye mixture for one 5 mm gel slot.
- For larger gel slots, add 1 - 2 µl of prepared sample-dye mixture more for each additional mm of the slot width. Avoid loading more than 1µg of DNA into one gel slot.

The high range ladder is recommend to be used on 0,7 - 1% agarose gels prepared in 1X concentrated TAE or TBE buffer. The same 1X buffer shall also be filled into the electrophoresis tank. Suggested electrophoresis conditions are approximately 5 - 10 V/cm.
To reduce exposer to DNA intercalating dyes, we recommend staining after electrophoresis rather than during the gel run. The gel staining can be performed in a small bath prepared by freshly mixing a drop (up to 0,5µg /ml) of ethidium bromide in 200 - 300 ml of distilled water.
Ready-to-use Ladders are not recommended to be used for radioactive or fluorescent labeling reactions, as they include dyes, glycerol and EDTA in their storage buffer.

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