

TrackIt™ 25 bp DNA Ladder

Cat. no. 10488-022 **Size** 20 applications **Store at** 15°C to 30°C

Doc. Part no. 10488022.pps **Pub. no.** MAN0000837 **Rev.** 2.0

Description

The TrackIt™ 25 bp DNA Ladder is suitable for sizing double-stranded DNA fragments from 25–500 bp. The ladder is prepared from a plasmid containing repeats of a 25 bp DNA fragment.

The TrackIt™ 25 bp DNA Ladder is formulated with unique tracking dyes, Xylene Cyanol FF (XCFF) and Orange G, which allow you to visually track DNA migration during electrophoresis. The tracking dyes also indicate when maximum resolution is achieved.

The important features of the ladder are:

- Consists of 18 fragments in 25 bp increments ranging in the size from 25–450 bp, plus a 500 bp band, and an additional band at 2652 bp
- 125 bp reference band is ~2-fold brighter than all bands except the 500 bp and 2652 bp bands for easy band size determination
- Formulated with unique tracking dyes, XCFF and Orange G
- Designed for use with E-Gel® agarose gels and TBE/TAE agarose gels
- Supplied in a ready-to-load format
- Visualized with ethidium bromide or SYBR® Green staining

Specifications

Storage Buffer: 10 mM Tris-HCl, pH 7.5; 10 mM EDTA, pH 8.0;
0.06% XCFF; 0.4% Orange G; 5% glycerol

Concentration: 0.5 µg/µL

Storage: Store at 15°C to 30°C

For research use only. Not for use in diagnostic procedures.

Directions

The TrackIt™ 25 bp DNA Ladder is supplied in a ready-to-load format. *You do not need to heat the ladder prior to loading.*

Note: The TrackIt™ 25 bp DNA Ladder is not recommended for use with polyacrylamide gels. It is not designed for quantitation.

1. Vortex the ladder gently to ensure the solution is homogeneous.
2. Load the ladder using the loading volumes listed below to obtain the best results.

TAE or TBE agarose gel (3%–4%)

Load 5 µL TrackIt™ 25 bp DNA Ladder per 5 mm lane width on a TAE or TBE agarose gel.

4% E-Gel® agarose gel

Mix 2 µL TrackIt™ 25 bp DNA Ladder with 18 µL deionized water and load 20 µL of the diluted ladder in the well of a single-comb E-Gel® agarose gel. Loading undiluted TrackIt™ DNA Ladder on an E-Gel® agarose gel results in loss of resolution.

3. Load your DNA samples.

We recommend using the TrackIt™ Cyan/Orange Loading Buffer to prepare your DNA samples. The TrackIt™ Loading Buffers contain the same two tracking dyes as the TrackIt™ DNA Ladders, which allow you to visually track DNA migration during electrophoresis.

Note: If you are using TrackIt™ Cyan/Orange Loading Buffer to prepare samples for E-Gel® agarose gels, dilute this buffer 60-fold (refer to the manual supplied with the loading buffer).

4. After electrophoresis, stain the DNA ladder with ethidium bromide or SYBR® Green I Nucleic Acid Gel Stain.

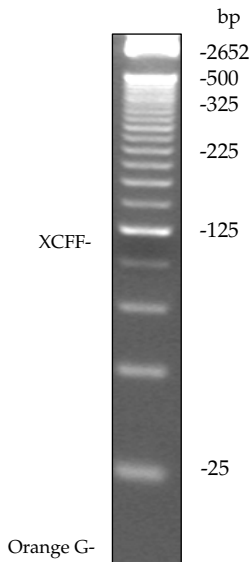
Note: You do not need to stain E-Gel® agarose gels because the gels contain ethidium bromide.

5. Visualize DNA bands on a UV transilluminator. An example of the ladder analyzed on an E-Gel® agarose gel is shown on the next page.

Example

The TrackIt™ 25 bp DNA Ladder (2 μ L) was diluted with 18 μ L of deionized water and analyzed on a 4% E-Gel® agarose gel. The gel was visualized and imaged on a UV transilluminator equipped with a camera. The migration of tracking dyes is indicated in the figure below.

Note: For more details on the migration of XCFF and Orange G in different percentage agarose gels, contact Technical Support.



Additional Products

Product	Amount	Catalog no.
E-Gel® 4%, 18 Pak	18 gels	G5018-04
UltraPure™ Agarose	100 g	15510-019
UltraPure™ Low Melting Point Agarose	50 g	15517-014
UltraPure™ 10 mg/ml Ethidium Bromide	10 mL	15585-011
TrackIt™ Cyan/Orange Loading Buffer	3 × 0.5 mL	10482-028
SYBR® Green I Nucleic Acid Gel Stain	500 µL	S-7563

Certificate of Analysis

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