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TrackIt™ 10 bp DNA Ladder

Cat. no. 10488-019 **Size** 20 applications **Store at 15°C to 30°C**

Doc. Part no. 10488019.pps **Pub. no.** MAN0000836 **Rev.** 2.0

Description

Use the TrackIt™ 10 bp DNA Ladder to size double-stranded DNA fragments from 10–200 bp.

The TrackIt™ 10 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 33 fragments ranging in the size of 10–200 bp and an additional fragment at 1668 bp
- 100 bp reference band is ~2-fold brighter for easy band size determination
- Formulated with unique tracking dyes, XCFF and Orange G
- Designed for use with E-Gel® agarose gels and TBE or 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
Storage:	Store at 15°C to 30°C

Directions

The TrackIt™ 10 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™ 10 bp DNA Ladder is not recommended for use with polyacrylamide gels. It is not designed for quantitation.

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

   TAE or TBE agarose gel (4%)

   Load 5 µL of TrackIt™ 10 bp DNA Ladder per 5 mm lane width on a TAE or TBE agarose gel.

   4% E-Gel® agarose gel

   Mix 2 µL of the TrackIt™ 10 bp DNA Ladder with 18 µL of deionized water. 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 that allow you to visually track DNA migration during electrophoresis.

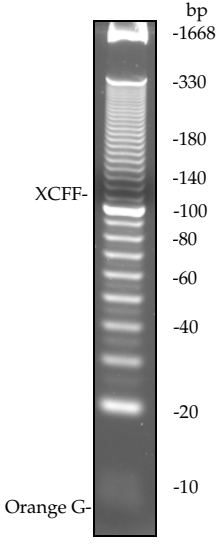
   Note: If you are using TrackIt™ Cyan/Orange Loading Buffer to prepare samples for E-Gel® agarose gels, dilute this buffer 60-fold (refer to the manual supplied with the loading buffer).
4. After electrophoresis, stain the DNA ladder with ethidium bromide or SYBR® Green I Nucleic Acid Gel Stain.

   Note: There is no need to stain the E-Gel® agarose gels as the gels contain ethidium bromide.
5. Visualize the DNA bands of the ladder 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™ 10 bp DNA Ladder (2 µL) was mixed with 18 µL 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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