### molecular biology

Marketplace Science, savings, and something fun

# **DNA electrophoresis products with a track record of success**

GeneRuler DNA Ladder with new TriTrack DNA Loading Dye

FastDigest Restriction Enzymes Direct PCR kits and master mixes

Save up to 40% through August 2018 on products from the Thermo Scientific DNA electrophoresis lineup\*

Find out how to get better DNA electrophoresis results

Solve science-themed puzzles

thermofisher.com/marketplace



#### Top DNA electrophoresis picks

% off

Top companion products

40% off

#### Top picks to streamline DNA electrophoresis

Use promotion code **RMDD25** when ordering. Offers are valid from May 1, 2018, to August 31, 2018. Refer to back cover for additional terms and conditions.\*

Product	Quantity	Cat. No.
GeneRuler 100 bp DNA Ladder, ready-to-use	50 µg	SM0243
GeneRuler 1 kb DNA Ladder, ready-to-use	50 µg	SM0314
GeneRuler 100 bp Plus DNA Ladder, ready-to-use	50 µg	SM0323
GeneRuler DNA Ladder Mix, ready-to-use	5 x 50 µg	SM0333
GeneRuler 50 bp DNA Ladder, ready-to-use	50 µg	SM0373
GeneRuler Low Range DNA Ladder, ready-to-use	50 µg	SM1193
GeneRuler Ultra Low Range DNA Ladder	50 µg	SM1213
GeneRuler 1 kb Plus DNA Ladder, ready-to-use	50 µg	SM1334
GeneRuler Express DNA Ladder, ready-to-use	50 µg	SM1553
Phire Plant Direct PCR Master Mix	250 reactions	F160S
Phire Plant Direct PCR Master Mix	1,250 reactions	F160L
Phire Tissue Direct PCR Master Mix	250 reactions	F170S
	1,250 reactions	F170L
Phusion Blood Direct PCR Master Mix	100 reactions	F175S
	500 reactions	F175L
FastDigest Restriction Enzymes	Varies	All**

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\*\* The FastDigest product catalog numbers can be found at thermofisher.com/marketplace

#### Top companion products

Use promotion code **RMDD40** when ordering. Offers are valid from May 1, 2018, to August 31, 2018. Refer to back cover for additional terms and conditions.\*

Product	Quantity	Cat. No.
TAE Buffer	1 L	B49
TBE Buffer	1 L	B52
DNA Loading Dye (6X)	5 x 1.0 mL	R0611
Orange DNA Loading Dye (6X)	5 x 1.0 mL	R0631
TriTrack Loading Dye (6X)	5 x 1.0 mL	R1161
MassRuler DNA Loading Dye (6X)	5 x 1.0 mL	R0621
	100 g	R0491
TopVision Agarose	500 g	R0492
TopVision Low Melting Point Agarose	25 g	R0801

# Simple tips to become a DNA electrophoresis champion

# Tip: Reduce tedious pipetting and errors—choose products with a direct gel loading buffer.

Direct gel loading buffers include a density reagent and tracking dyes for loading of DNA on a gel—offering convenience and time savings. Thermo Scientific<sup>™</sup> products with a direct gel loading buffer include:

- Thermo Scientific<sup>™</sup> FastDigest<sup>™</sup> Restriction Enzymes—176 enzymes formulated with 100% activity in one buffer
- Thermo Scientific<sup>™</sup> Direct PCR kits—DNA amplification directly from unpurified animal, plant, and blood samples
- Thermo Scientific<sup>™</sup> GeneRuler<sup>™</sup> DNA Ladders ready-to-use DNA ladders designed for DNA sizing and approximate qu<sup>a</sup>ntification

# Tip: Avoid confusing results—select the right DNA ladder for your application.

This may seem simple, but too often there's unnecessary guesswork in interpreting DNA electrophoresis results because the wrong ladder was used. To choose the right ladder, consider:

- **Size range**—use a selection table to choose the DNA ladder suitable for your fragment sizes
- **Ready-to-use format**—convenient since they are premixed with loading dye/buffer
- **Tracking dyes**—choose a ladder with tracking dyes that will adequately help track DNA migration and won't interfere with UV visualization
- **Reference bands**—choose a ladder with easy-tointerpret fragment sizes and bright reference bands
- **Stability**—DNA ladders that are room-temperature stable can be left out on a lab bench and also are more environmentally friendly with ambient shipping



Thermo Scientific<sup>™</sup> TriTrack<sup>™</sup> loading buffer has three convenient tracking dyes to help easily monitor separation of DNA ladders. The dyes also do not interfere with UV visualization.



Xylene cyanol FF TAE: 4,160 bp TBE: 3,030 bp

Bromophenol blue: TAE: 370 bp TBE: 220 bp

Orange G TAE/TBE: <50 bp

**New**—the ready-to-use formats of GeneRuler ladders have now been upgraded to include TriTrack buffer.

For details, go to thermofisher.com/generuler



For additional DNA electrophoresis tips, troubleshooting, and a handy printable DNA ladder selection guide, download the digital flipbook at **thermofisher.com/mpflipbook** 

# Champion of the Lanes game

#### Can you solve these science-themed puzzles?

Fill in the letters on the lines below to solve the puzzles. Figure out the words represented by the pictures, and add or subtract letters as indicated to discover science terms, phrases, and the names of molecular biology products that can help you win the race to results.





Get the answers and find more science-themed puzzles and games at thermofisher.com/marketplacefun



#### For more information, go to thermofisher.com/marketplace





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\* Discount will apply to qualifying orders received by Life Technologies between May 1, 2018, and August 31, 2018, or until promotional supplies are depleted, whichever comes first. Promotion code must be presented at the time of order. Discount applies to the list price in effect at the time the order is received by Life Technologies. Promotion cannot be combined with other discounts or promotions. Offer void where prohibited, licensed, or restricted by federal, state, provincial, or local laws or regulation or agency/institutional policy. Other restrictions may apply. **C0L06231 0518** 

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