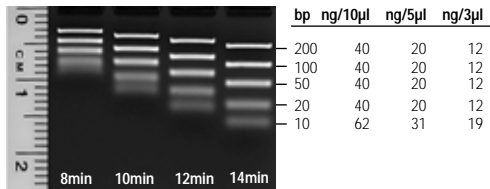


FastRuler™ DNA Ladders, ready-to-use (10 – 10000 bp)

NEW

FastRuler™ DNA Ladder, Ultra Low Range, ready-to-use

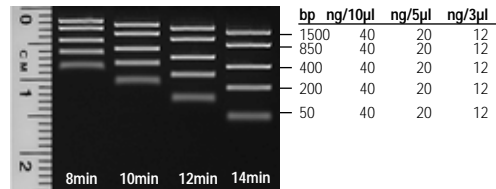
#SM1233



4% TopVision™ LE GQ Agarose (#R0491), 20µl/lane, 1X TBE, 7V/cm

FastRuler™ DNA Ladder, Low Range, ready-to-use

#SM1103



2% TopVision™ LE GQ Agarose (#R0491), 20µl/lane, 1X TBE, 7V/cm

FastRuler™ DNA Ladders, ready-to-use

- Fast separation (8-14min), short separation distance (10-20mm)
- Load for approximate DNA quantification
- Premixed with loading dye solution
- Load directly onto gel
- Stable at room temperature for 6 months

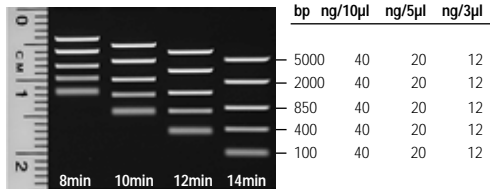
Product	Catalog #	Formulation	Concentration, ng/µl	Amount, µl	Applications	Range, bp	Loading, µl/lane	Agarose, %
FastRuler™, Ultra Low Range, ready-to-use	SM1233	in Orange Loading Dye	22.2	2x500	50-333	10-200	3-20	4.0
FastRuler™, Low Range, ready-to-use	SM1103	in MassRuler™ Loading Dye	20	2x500	50-333	50-1500	3-20	2.0
FastRuler™, Middle Range, ready-to-use	SM1113	in MassRuler™ Loading Dye	20	2x500	50-333	100-5000	3-20	1.0
FastRuler™, High Range, ready-to-use	SM1123	in MassRuler™ Loading Dye	20	2x500	50-333	500-10000	3-20	1.0

FastRuler™ DNA Ladders are supplied with 6X Orange Loading Dye Solution (#R0631) or 6X MassRuler™ Loading Dye Solution (#R0621)

FastRuler™ DNA Ladders, ready-to-use (10 – 10000 bp)

FastRuler™ DNA Ladder, Middle Range, ready-to-use

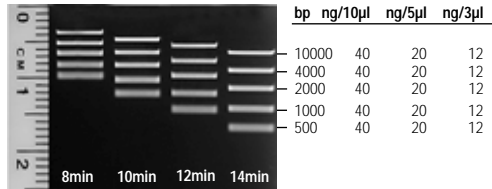
#SM1113



1% TopVision™ LE GQ Agarose (#R0491), 20µl/lane, 1X TAE, 7V/cm

FastRuler™ DNA Ladder, High Range, ready-to-use

#SM1123



1% TopVision™ LE GQ Agarose (#R0491), 20µl/lane, 1X TAE, 7V/cm

Recommended Protocol for Loading

FastRuler™ DNA Ladders, ready-to-use

Step 1: Mix gently

Step 2: Load 5µl per 5mm gel lane*

- * For gels with other lane width, use 1-2µl (0.02-0.04µg/µl) of the ready-to-use DNA Ladder per 1mm of gel lane.

Tips

- DNA ladders do not require heating before loading
- For accurate sizing and quantification, use the same loading dye solution for both DNA sample and DNA ladder
- Add 1/6 volume of 6X Orange Loading Dye Solution (#R0631) or 6X MassRuler™ Loading Dye Solution (#R0621) to your DNA sample
- For optimal results load equal volumes of DNA sample and DNA ladder
- Use TBE or TAE buffer both to prepare the gel and to run electrophoresis. Separation of small DNA fragments is better in TBE buffer (#B52) than in conventional TAE buffer (#B49). For recommended buffer see data below each picture of the ladder
- Adjust the concentration of the sample such that the expected amount of DNA loaded is approximately equal to that of the nearest size ladder band