



500bp DNA Ladder

Catalog#: 19-113

Lot#:

Contents: 1 ml (200 lanes) 60 µg/ml
Store at 4°C.

Reagent for in-vitro laboratory use only

General Description

This ladder is a dsDNA ladder suitable for sizing double-stranded DNA fragments. Apex purified molecular weight markers are premixed ladders and loading buffer in a single tube. No mixing is required. Apex molecular weight markers are 100% marker without extraneous DNA and do not contain any residual plasmid.

Range

500 bp to 8 Kb in 500 base pair increments

Reference Bands

Located at 5 Kb

Composition of Storage Buffer

Supplied in ready-to-load format in modified Type II gel loading buffer: 15% w/v Ficoll 400 [GE Healthcare], 0.06% w/v Bromphenol blue, 0.06% w/v Xylene cyanol FF, 30mM EDTA

Shipping and Storage Conditions

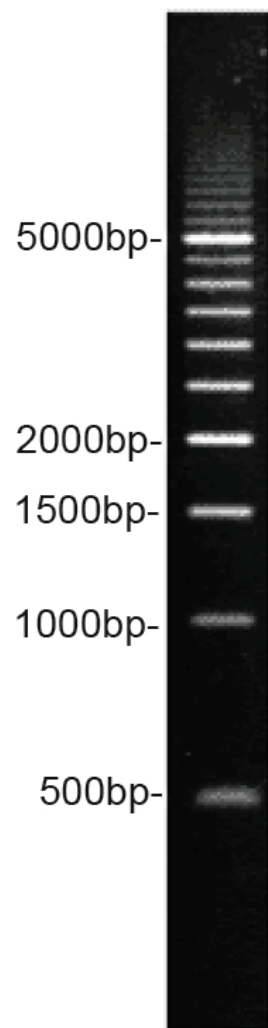
Apex custom DNA ladders may be kept safely at room temp. for at least 3 months. Ladders are guaranteed for 12 months from date of shipment when stored at 4°C. Shipped via overnight carrier at ambient temp.

Suggestion for use:

- **Important:** Mix ladder briefly before use. Do not heat the ladder.
- Load 5 µL of ladder per lane (for gel wells of ~5-10mm width).
- Agarose gel electrophoresis: Prepare a 1 – 1.5% gel.
- Ethidium bromide (0.5 µg/mL) is the recommended gel stain. Other DNA stains can be used if preferred.

Factors Influencing Resolution and Accurate Sizing of DNA Fragments

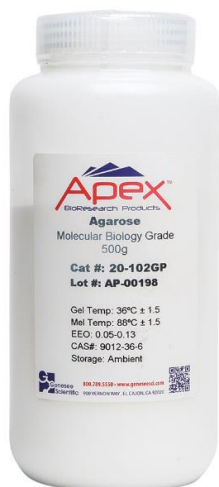
1. DNA loading: For accurate size determinations, load the smallest practical amount of sample DNA – e.g., 10-20ng of a single fragment is readily visible and will yield a sharp, accurately sized band.
2. Well thickness: For best resolution of DNA bands, use only properly formed sample wells, up to 1mm in thickness.
3. Salt concentration: It is important to accurately match the salt concentration of the ladder mixture to that of your samples in order to obtain the best size determinations. One useful technique for very precise sizing of sample fragments, which eliminates concerns over matching salt concentrations, is to co-electrophorese the ladder and the sample in the same well. Apex's low-background 20bp ladder (catalog #19-107) is ideal for this purpose, making accuracy of ~1% routinely achievable. Ladder-only and sample-only lanes should be run to aid in interpretation of electrophoresis patterns.



Related Products

Description	Cat. No.
Taq DNA Polymerase, 500 Units (5U/ul) with 10X Standard and Ammonium Reaction Buffer 1 x 500u/Unit	42-800B1
Taq DNA Polymerase, 500 Units (5U/ul) with 10X Combination Buffer 2 x 500u/Unit	42-800B3
Taq DNA Polymerase, 500 Units (5U/ul) Glycerol Free 10 x 500u/Unit	42-800B4
Taq DNA Polymerase Master Mix, 2.0X 1.5mM MgCl ₂ (Final Concentration) 100 Reactions/Unit	42-131
dNTP Set, 4x25µmol (100mM) 4 x 250µl/Unit	42-410
dNTP Set, 4x100µmol (100mM) 4 x 1ml/Unit	42-403
dNTP Set, 4x500µmol (100mM) 20 x 1ml/Unit	42-404
dNTP Mix, 20µmol (40mM) 1 x 500µl/Unit	42-411
dNTP Mix, 200µmol (100mM) 2 x 1ml/Unit	42-405
dNTP Mix, 100µmol (10mM) 10 x 1ml/Unit	42-406
dNTP Mix, 100µmol (40mM) 5 x 500µl/Unit	42-407
Apex 100bp-Low DNA Ladder, 250 Applications	19-109
Apex 1 Kb DNA Ladder, 333 Applications	19-115
Apex 200bp DNA Ladder, 200 Applications	19-111

Apex General Purpose Agarose



Apex AGAROSE guarantee

- Low EEO (<0.13) - This means biological macromolecules such as proteins or nucleic acids as well as larger particles such as viruses and subcellular fragments can migrate through the gel network virtually interference free due to the gel's neutral properties.
- Sharp, finely resolved banding resolution as well as excellent transparency for easy reading.
- Extraordinarily low gel background after applying staining agents.
- Superior mechanical resistance for more reliable and easier handling.



Concentration: 0.625mg/ml

EtBr Dropper Bottle - Adding and removing Ethidium Bromide has never been easier! For the recommended final concentration of 0.5ug/ml, simply add one drop for every 50ml of solution.



EtBr Destaining Bags

Efficiently remove Ethidium Bromide from solutions and gels for safe and easy disposal. Now, with our NEW activation solution (included) our destaining bags demonstrate increased absorption efficiency speed relative to other similar products. Simply Add ~5ml of activation solution to the bag prior to use. For comparison data and absorption kinetics, please visit us online today at www.geneseesci.com/etbrproducts.

Description	Cat. No.
Apex TAE 25X Buffer, 1.6L Ultra Pure	20-195
Apex TBE Buffer 10X Concentrate, 4L	20-196
Apex EtBr Dropper Bottle, 10ml, 0.625mg/ml	20-276
Apex General Purpose Agarose, 100g	20-101
Apex General Purpose Agarose, 500g	20-102
Apex Super Resolution Agarose, 100g	20-106
Apex Super Fine Resolution Agarose, 100g	20-239
Apex Low Melt Agarose, 100g	20-104
Apex Low Melt Sieve Agarose, 100g	20-245

Three options to access your contract prices:

- 1) Visit www.geneseesci.com and click on "Account Setup". Fill out your member information and your account will be activated within hours.
- 2) Email us at support@geneseesci.com or call 1-800-789-5550 with your name, institution, and email address. We will email you your discount prices.
- 3) Call us at 1-800-789-5550 and ask for an Account Representative to contact you.

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