PageRuler™ Prestained Protein Ladder Plus

**Features**
- Broad range: 10-250 kDa.
- Bright orange reference bands: ~70 kDa and ~27 kDa.
- Ready-to-use - supplied in a loading buffer for direct loading on gels.
- Sharp bands.

**Description**
PageRuler™ Prestained Protein Ladders (PageRuler™ Prestained Protein Ladder Plus and PageRuler™ Prestained Protein Ladder) are designed for monitoring protein separation during SDS-polyacrylamide gel electrophoresis, verification of Western transfer efficiency and approximate sizing of proteins (1-3). The PageRuler™ Prestained Protein Ladder Plus contains two orange reference bands for easy orientation. It is a mixture of 9

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Related Documents (in pdf, ~100 KB):
- Certificate of Analysis: #SM1811
- SDS (English)
- SDS (English-USA)
- SDS (German)
- LabAid™

Lot specific pictures:
- 13527, 13286, 13757, 14602, 14813, 17854, 20023, 20857, 22521

2x250 µl (for 100 mini gel applications, 5 µl/well or 50 large gel applications, 10 µl/well)
recombinant, highly purified, colored proteins with apparent molecular weights of 10 to 250 kDa. A blue chromophore is coupled to these proteins, and proteins of two reference bands of ~70 kDa and of ~27 kDa are colored with an orange dye. PageRuler™ Prestained Protein Ladders can be used in Western blotting on PVDF (see protocol for Western Blotting), nylon and nitrocellulose membranes.

Applications
- Monitoring of protein migration during SDS-polyacrylamide gel electrophoresis.
- Monitoring of protein transfer onto membranes during Western blotting (see protocol for Western Blotting).
- Sizing of proteins on SDS-polyacrylamide gels and Western blots.

Composition
0.1-0.2 mg/ml of each protein in 62.5 mM Tris-H₃PO₄ (pH 7.5 at 25°C), 1 mM EDTA, 2% SDS, 10 mM DTT, 1 mM NaN₃ and 33% glycerol.

Quality Control
Tested in SDS-polyacrylamide gel electrophoresis and Western blotting.

Storage
Store at -20°C.
Stable at +4°C for up to 3 months.

Recommendations for Loading

1. Thaw the ladder either at room temperature or at 37-40°C for a few minutes to dissolve precipitated solids. Do not boil.
2. Mix gently, but thoroughly, to ensure that the solution is homogeneous.
3. Load the following volumes of the ladder on SDS-polyacrylamide gel:
   - 5 µl per well for mini-gels, 3 µl per well for blots;
   - 10 µl per well for large gels, 6 µl per well for blots.

Note
- The indicated loading volume is recommended for gels with a thickness of 0.75 mm. For thicker gels, the loading volume should be increased.
- Each lot of PageRuler™ Prestained Protein Ladder Plus is calibrated against a precisely sized PageRuler™ Unstained Protein Ladder in Tris-glycine gel and the calculated apparent molecular weights are reported in the product’s Certificate of Analysis.
- Prestained proteins can have different mobilities in various SDS-PAGE-buffer systems. However, they are suitable for approximate molecular weight determination when calibrated against unstained standards in the same system.
- A separation gel resolves proteins effectively according to their molecular weight. Linear gradient gels are used for resolution of both small and large proteins, while low percentage gels are recommended for analysis of large proteins. In these gels, small proteins migrate with the tracking dyes during electrophoresis.
Related Products

- Loading Buffer Pack
- PageBlue™ Protein Staining Solution
- PageRuler™ Unstained Protein Ladder
- 10X Tris-glycine-SDS Buffer
- 10X Tris-tricine-SDS Buffer
- DTT

References

