

EXREsolve™ Prestained Protein Markers 10-180 kDa

Catalog Number: EXBR017



info@exreprotein.com

For Research Use Only. Not Intended for Diagnostic or Therapeutic Use.

Product Description

The EXREsolve™ Prestained Protein Markers product is composed of 10 purified pre-stained proteins with a molecular weight range of 10 kDa to 180 kDa. The individual protein markers are 10 kDa, 17 kDa, 25 kDa, 35 kDa, 45 kDa, 55 kDa, 70 kDa, 100 kDa, 130 kDa, and 180 kDa. The 10 kDa marker is green, the 70 kDa marker is red, and the other 8 markers are blue. This product is suitable as a protein molecular weight standard for SDS-PAGE or Western blot and is compatible with PVDF, nylon, and nitrocellulose membranes. The prestained markers enable direct observation of the protein electrophoresis status and estimation of protein transfer during Western Blot.

The product is a ready-to-use liquid that does not require heating, dilution or additional reducing agents before loading sample. The concentration of each protein band in the product is approximately 0.1-0.4 mg/mL.

Available sizes: 1 Pack (250 uL) or 5 Pack (5 x 250 uL)

For the separation of 10-250 kDa proteins, we recommend EXREsolve™ FlexKD PAGE Gel (catalog # EXBR001).

Limitations

- For Research Use Only. Not Intended for Diagnostic or Therapeutic Use.

Precautions

- Always wear appropriate protective clothing and follow safe laboratory procedures.

Storage

- Shipped on blue ice.
- Store at -20°C for up to 12 months. **Avoid repeated freeze-thaw cycles.**
- **Storage Buffer:** 20 mM Tris-H₃PO₄ (pH 7.5 at 25°C), 2% (w/v) SDS, 0.2 mM DTT, 3.6M urea, 15% (v/v) glycerol.

Protocol

1. Thaw at room temperature for a few minutes prior to use. **Do not boil.**
2. Load the following recommended volumes on an SDS-polyacrylamide gel:
 - 5 uL per well for mini gel (0.75-1.0 mm thickness)
 - 2-3 uL per well for Western blot.
 - Volumes may need to be increased for low-percentage gels (<8%), large gels, or gel thickness ≥ 1.5 mm.

Note:

- Transfer times of high molecular weight proteins (>100 kDa) during Western blotting may need to be increased.
- The low molecular weight protein markers may migrate with the dye front in low-percentage gels (<8%).
- The mobility of the prestained protein markers may be affected by various buffers and gel concentrations (See Figure 2). To achieve suitable approximation of molecular weight determination, it is recommended to calibrate against unstained standards using the same conditions.

Figure 1. EXREsolve™ Prestained Protein Markers 10-180 kDa Typical Data

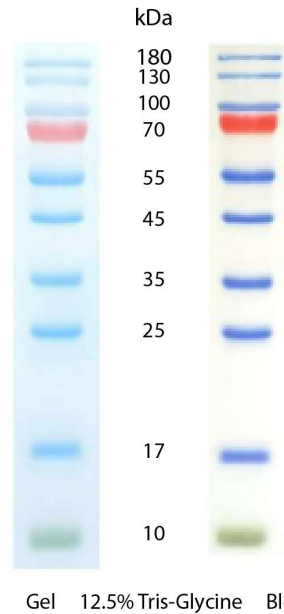


Figure 2. Example of EXREsolve™ Prestained Protein Markers 10-180 kDa Mobility in Various Conditions

Band	Color	TRIS-GLYCINE	BIS-TRIS (MOPS)	BIS-TRIS (MES)
1	Blue	180	180	180
2	Blue	130	130	130
3	Blue	100	100	100
4	Red	70	70	70
5	Blue	55	55	55
6	Blue	45	45	45
7	Blue	35	35	35
8	Blue	25	25	25
9	Blue	17	17	17
10	Green	10	10	10