

Product Details

This product is a mixture of seven highly purified pre-stained proteins ranging from 40 kDa to 275 kDa. The 275 kDa and 72 kDa bands are orange, 50 kDa band is green, and other bands are blue. It is designed for observing protein separation during SDS-PAGE, verifying western transfer efficiency on membranes, and approximating the size of proteins.

Product Features

- Three Pre-Stained Color
- Neat, Bright and Well-distributed Bands
- More Accurate Molecular Weight Position

Storage Buffer

20 mM Tris-H₃PO₄ (pH 7.5), 2 mM EDTA, 1.5 % (W/V) SDS, 3 mM DTT, 0.1% (V/V) Proclin300, 15 % (V/V) Glycerol.

Shipping and Storage

The product is shipped with blue ice. Upon receipt, store it immediately at-20°C for long term storage.

This product is stable after storage at:

-20°C for up to three years or 4°C for up to two months.

Procedure

- 1. Thaw the product at room temperature for a few minutes to dissolve precipitated solids. Do not boil!
- 2. Mix gently, but thoroughly, to ensure the solution is homogeneous.
- 3. Load the following volumes of the product on an SDS-PAGE:
- 3-5 μL per well for mini gel
- 5-10 μL per well for large gel

Use the same volumes for Western blot. The loading volumes listed above are recommended for gels with a thickness of 0.75-1.0 mm.

The loading volume should be doubled for 1.5 mm thick gels.

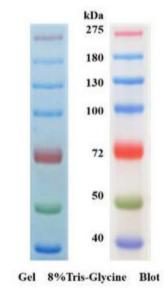
Product Specification

| Number of Bands | 7 |
|------------------|------------------------------------|
| Size Range | 40 to 275 kDa |
| Stain Type | 3 colors: Blue, Orange, Green |
| Molecular Weight | 275, 180, 130, 100, 72, 50, 40 kDa |
| Quantity | 2 x 250 ul, 10 x 250 ul |
| System Type | SDS-PAGE, Western Blot |

Notes

- 1. This product has been prepared in 1× SDS-PAGE loading buffer and can be used directly without boiling, diluting and adding reducing agent.
- 2. Longer transfer times or higher transfer voltages may be required for Western blot of large (>100 kDa) proteins.
- 3. Don't add SDS to transfer buffer. If SDS must be used, the concentration should not exceed 0.02-0.04%.
- 4. In low-percentage gels (< 10 %), the low-molecular weight proteins in the ladder may migrate with the dye front.
- 5. Pre-stained 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. See the table provided for migration patterns in different electrophoresis conditions.
- 6. For your safety and health, please wear a lab coat and disposable gloves.

SDS-PAGE



SDS-PAGE band profile of the Star Ribbon Pre-stained Protein Marker

Migration patterns of the Marker in different electrophoretic conditions

| Gel type Gel concentration | | Tris-Glycine | | | | | | | 0.000 | Tris- cetate | Bis-Tris | | | | |
|------------------------------|--|--|---------------------------------|--------------|--|--|---|----------------------------------|--------------------------------------|------------------|----------|--|--|-----|--|
| | | 8% | | 10% | | 12.5% | | 4-20% | | 6% | | 4-12% 4-2 | | :0% | |
| Runr | - | Tris-Glycine | | | | | | | | Tris- Acetate | | MOPS | | | |
| П | | | Apparent Molecular Weights, kDa | | | | | | | | | | | | |
| % length of gel | 10 20 30 40 50 60 70 | 20 — 180 — 190 30 — 130 — 72 40 — 100 — 50 50 — 72 — 40 | 180 130 100 72 50 | _ 72 _ 50 | 275 180 130 100 72 50 40 | 275 180 130 100 70 50 40 | - | - 250 - 180 - 130 - 100 | 250 180 130 100 65 50 | | | 25 18 13 10 65 50 40 | | | |
| | 80 | - | 40 | | | | | | _ | 50 | _ | 40 | | | |
| | 90 100 | | | | | | | | | 40 | | | | | |

The apparent molecular weight of each protein (kDa) has been determined by calibration of each protein against an unstained protein ladder in specific electrophoresis conditions. Migration patterns were determined using commercial precast mini gels.