

Product Information

sigma-aldrich.com

3050 Spruce Street, Saint Louis, MO 63103 USA
Tel: (800) 521-8956 (314) 771-5765 Fax: (800) 325-5052 (314) 771-5757
email: techservice@sial.com sigma-aldrich.com

Color Marker Low Range (M.W. 6,500–45,000)

Catalog Number **C3187**
Storage Temperature $-70\text{ }^{\circ}\text{C}$

Product Description

The Color Marker Low Range is specially designed for use with a Laemmli SDS-PAGE system, the PhastSystem[®] electrophoresis workstation, and protein transfer to solid phase supports such as nitrocellulose, nylon, and PVDF membranes. The Color Marker Low Range consists of 5 proteins, each conjugated to a different dye, thereby, providing a visual monitor of migration during electrophoresis and/or protein transfer efficiency to a membrane.

Each vial of Color Marker Low Range contains 500 μl of a mixture of 5 dye conjugates (see Table 1) in 62 mM Tris-HCl, pH 7.5, containing 2% SDS, 0.1 mM EDTA, 100 mM dithiothreitol, 4 M urea, 0.005% bromophenol blue, and 30% glycerol.

Table 1.
Protein Mixture of C3187

Protein	Native Molecular Mass of Subunit (kDa)*	Color of Conjugate
Ovalbumin, chicken egg	45	Yellow
Carbonic Anhydrase, bovine erythrocytes	29	Orange
Trypsin Inhibitor, soybean	20	Green
α -Lactalbumin, bovine milk	14.2	Purple
Aprotinin, bovine milk	6.5	Blue

* These native molecular masses are altered by the attachment of dye.

When precise molecular weight determinations are required, use Biotinylated Molecular Weight Marker (Catalog Number B2787) or SigmaMarker[™] Low Range (Catalog Number M3913).

Color Marker Low Range may be stained with Brilliant Blue, but band intensity will vary.

Precautions and Disclaimer

This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

Storage/Stability

The product ships on dry ice and storage at $-70\text{ }^{\circ}\text{C}$ is recommended. After the first thaw, aliquot remaining material and store at $-70\text{ }^{\circ}\text{C}$. Repeated freezing and thawing is not recommended. By eliminating multiple freeze/thaw cycles, the effective lifetime will be prolonged.

Procedure

Simply thaw to room temperature and load the gel. **Do not heat** the Color Marker Low Range.

Recommended sample volumes:

PhastGel[®] system – 1–4 μl
standard size gel (16 \times 14 cm) – 20 μl for visualization on the gel or 10 μl when transferring to a membrane
mini-gel (10 \times 10 cm) – 10 μl for visualization on the gel or 5 μl when transferring to a membrane

References

- Laemmli, U.K., Nature, **227**, 680 (1970).

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