

## Reference

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

## Ordering Information

### Catalog

Number	Product Description
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#### Prestained Standards

161-0305	<b>Prestained SDS-PAGE Standards</b> , low range, 500 $\mu$ l
161-0309	<b>Prestained SDS-PAGE Standards</b> , high range, 500 $\mu$ l
161-0318	<b>Prestained SDS-PAGE Standards</b> , broad range, 500 $\mu$ l
161-0324	<b>Kaleidoscope Prestained Standards</b> , 500 $\mu$ l
161-0325	<b>Kaleidoscope Polypeptide Standards</b> , 500 $\mu$ l

#### Molecular Weight Standards

161-0304	<b>SDS-PAGE Standards</b> , low range, 200 $\mu$ l
161-0303	<b>SDS-PAGE Standards</b> , high range, 200 $\mu$ l
161-0317	<b>SDS-PAGE Standards</b> , broad range, 200 $\mu$ l
161-0314	<b>Silver Stain SDS-PAGE Standards</b> , low range, 200 $\mu$ l
161-0315	<b>Silver Stain SDS-PAGE Standards</b> , high range, 200 $\mu$ l
161-0306	<b>Biotinylated SDS-PAGE Standards</b> , low range, 250 $\mu$ l
161-0311	<b>Biotinylated SDS-PAGE Standards</b> , high range, 250 $\mu$ l
161-0319	<b>Biotinylated SDS-PAGE Standards</b> , broad range, 250 $\mu$ l
161-0326	<b>Polypeptide SDS-PAGE Standards</b> , 200 $\mu$ l

#### Specialty Standards

161-0310	<b>IEF Standards</b> , pI range 4.45-9.6, 250 $\mu$ l
161-0320	<b>2-D SDS-PAGE Standards</b> , 500 $\mu$ l

*Bio-Rad Laboratories, 2000 Alfred Nobel Dr., Hercules, CA 94547*

4006024 Rev D



# Prestained SDS-PAGE Standards, Low Range

## Catalog Number 161-0305

Product shipped at room temperature.  
Store at -20 °C upon arrival



**BIO-RAD**

Bio-Rad's prestained standards are available in high, low, and broad molecular weight ranges. Blue dye has been covalently attached to the standard proteins and will not be dissociated by normal staining or destaining. The protein mixtures are provided in a stable aqueous solution. No reconstitution or further dilution is required before use.

## Applications

Prestained SDS-PAGE Standards provide a quick and easy way to assess the quality of an electrophoretic transfer and act as a control in repetitive blotting experiments. The visibility of the standards makes it possible to monitor the separation of proteins while electrophoresis is in progress, even after the dye front has run off the gel. The standards can also be used to locate a protein for excision from an unstained preparative gel.

## Specifications

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<b>Contents</b>	Approximately 625 µg total protein* in 33% (v/v) glycerol, 3% SDS, 10 mM Tris pH 7.0, 10 mM DTT, 2 mM EDTA, 0.01% NaN <sub>3</sub> .
<b>Storage</b>	-20 °C
<b>Shelf life</b>	1 year at -20 °C
<b>Volume</b>	500 µl
<b>Applications per vial</b>	25-100

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\* Total protein concentration is an approximation based on the average concentrations of multiple lots. Actual concentrations will vary.

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## Protein Molecular Weights

The molecular weights of every lot of prestained standards are individually calibrated against Bio-Rad's SDS-PAGE Standards. The lot specific calibrated molecular weights are included with every vial. Prestained standards are useful for estimating the molecular weights of sample proteins, however, for precise molecular weight determination, use Bio-Rad's SDS-PAGE, Silver Stain SDS-PAGE, or Biotinylated SDS-PAGE Standards in addition to the prestained standards.

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## Instructions for Use

Heat the solution to 40 °C for 1 minute to dissolve any solids which may have precipitated at -20 °C. To visualize the prestained standards after blotting, load 10 µl for full size gels (16-20 cm) and 5 µl for mini gels. To visualize the standards during electrophoresis, load 20 µl for full length gels and 10 µl for mini gels. To see the standards during the run, it is helpful to hold a sheet of white paper behind the gel.

**Note:** The prestaining of the proteins substantially inhibits them from being further stained with biotin/avidin systems, colloidal gold, Coomassie® R-250, or amido black. The standards can be silver stained, but silver staining will result in broad bands because of the large amount of protein in the sample.

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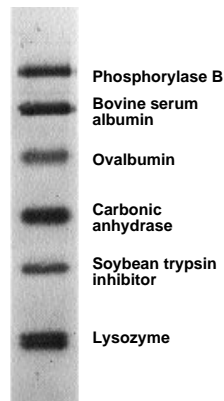
## Constituent Proteins

(See enclosed insert for lot specific calibrated molecular weights.)<sup>†</sup>

Protein	Source
Phosphorylase B	Rabbit muscle
Bovine serum albumin	Bovine plasma
Ovalbumin	Chicken egg white
Carbonic anhydrase	Bovine erythrocytes
Soybean trypsin inhibitor	Soybean
Lysozyme	Chicken egg white

<sup>†</sup> Covalently bound dye alters the molecular weight of the proteins and produces relatively broad bands. The molecular weights are calibrated from the center of each protein band.

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**Fig. 1. Low Range Prestained SDS-PAGE Standards.**

5 µl of the standards were run on a 12% SDS poly-acrylamide gel according to the method of Laemmli.<sup>1</sup> The standards were run on the Mini-PROTEAN® II cell and electrophoretically transferred to nitrocellulose using the Mini Trans-Blot® cell.

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