

## SDS Protein Gel Loading Solution (5X)

**Catalog #:** 351-334-021EA 5mL  
351-334-021 Pack 5 x 5mL

**Store at:** 15°C to 30°C  
**Shipped at:** ambient temperature

**Note:** Quality Biological's formulation does not contain 2-mercaptoethanol or dithiothreitol

### Description

Quality Biological's (QBI) SDS Protein Gel Loading Solution (5X) is prepared from molecular biology grade Tris base [tris(hydroxymethyl)aminomethane], sodium dodecyl sulfate (SDS), bromphenol (bromophenol) blue, and glycerol using Quality Biological's Molecular Biology Grade (MBG) Water.

### Applications

- *SDS-Page*<sup>1</sup>
- *Western Blotting*<sup>1</sup>

### Quality Control

#### General

All QBI products for Molecular Biology are prepared according to standard protocols. All products are subject to a variety of quality control procedures, including pH and conductivity determinations, in order to validate that the test product is within its specifications.

Test results of individual lots of SDS Protein Gel Loading Solution (5X) are available on the Quality Biological website.

**All products sold by Quality Biological are intended for research use only. This product has not been approved for diagnostic or IVD use.**

### Directions:

*For SDS-PAGE (denaturing gel electrophoresis with SDS)*

1. Using all the precautions necessary when working with proteins, add the following items to a protease free microcentrifuge tube:

5 – 10µL sample (see note below)

### OPTIONAL

- Add, **EITHER** 2-mercaptoethanol [BME] to a final concentration of 5% **OR** dithiothreitol [DTT] to a final concentration of 5mM
- 4µL SDS Protein Gel Loading Solution
- Bring total volume to 20µL with water or buffer

### Note:

- a) For complex mixtures, use 50µg total protein per lane
  - b) For purified proteins, use 0.5-5µg total protein per lane
2. Heat the samples at 100°C for 2-5 minutes
  3. Immediately chill the samples on ice for 2-3 minutes
  4. Load the samples into the lanes (wells) of the polyacrylamide gel
  5. Run the gel according to the specifications provided by the electrophoresis equipment manufacturer

**References**

1. Sambrook, J., Fritsch, E.F. & Maniatis, T. (1989)  
*Molecular Cloning, A Laboratory Manual*, 2<sup>nd</sup> Ed.  
Cold Spring Harbor Laboratory Press.

**Related Products****DEPC Treated Water**

Catalog #	351-065-721EA	100mL
	351-068-721	Pack of 4 x 100mL
	351-068-131	1000mL
	351-068-131CS	10 x 1000mL
	351-068-491	4 Liters
	351-068-151	10 Liters
	351-068-161	20 Liters

**Molecular Biology Grade Water**

Catalog #	351-029-721EA	100mL
	351-029-721	Pack of 4 x 100mL
	351-029-101	500mL
	351-029-101CS	10 x 500mL
	351-029-131	1000mL
	351-029-131CS	10 x 1000mL
	351-029-491	4 Liters
	351-029-151	10 Liters
	351-068-161	20 Liters

**Protein Running Buffer (10X)**

Catalog #	351-132-101	500mL
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**SDS Protein Gel Loading Solution (2X)**

Catalog #	351-082-661EA	10mL
	351-082-661	5 x 10mL