

## Specifications

- Size: 15 mL
- Storage: Store at ambient temperature in a tightly sealed container.  
**Note:** Do not store Protein Loading Buffer with  $\beta$ -mercaptoethanol for more than two weeks.
- Shelf Life: One year from date received.

## Formulation

125 mM	Tris-HCl, pH 6.8
50%	Glycerol
4%	SDS
0.2% (w/v)	Orange G

## Applications

4X Protein Loading Buffer is a loading buffer for protein gel electrophoresis. This loading buffer is not visible when imaged on an Odyssey Fc, Odyssey XF, Odyssey CLx, or Odyssey DLx and is only faintly visible when imaged in the visible channels on the Odyssey M. The buffer is optimized for use with SDS-PAGE and Tris-glycine-SDS running buffer.

## Protocol

Before use, warm buffer slightly until any SDS crystals disappear. SDS crystals may form at temperatures lower than 28 °C.

### Protocol for 4X Protein Loading Buffer

1. Add 100  $\mu$ L of  $\beta$ -mercaptoethanol to 900  $\mu$ L of 4X Protein Loading Buffer and mix well.
2. For every 3  $\mu$ L of sample, add 1  $\mu$ L of protein loading buffer. The recommended concentration for electrophoresis is 1X.
3. Follow your usual protocol for denaturing protein samples.

### Protocol for 2X Protein Loading Buffer

1. Combine 475  $\mu$ L of 4X Protein Loading Buffer with 475  $\mu$ L of ultrapure water, then add 50  $\mu$ L of  $\beta$ -mercaptoethanol. Mix well.
2. For every 1  $\mu$ L of sample, add 1  $\mu$ L of protein loading buffer.
3. Follow your usual protocol for denaturing protein samples.

## Limitation of Liability and Limited Use Label License

For Research Use Only. Not intended for human therapeutic or diagnostic use.

By using this product, you agree to the Limitation of Liability and the Limited Use Label License available online at [licor.com/packinserts](http://licor.com/packinserts) under the **Pack Inserts** heading (the "License"). The License is incorporated herein by this reference, and the License may be updated from time to time.



© 2021 LI-COR, Inc. LI-COR and Odyssey are trademarks or registered trademarks of LI-COR, Inc. in the United States and other countries. All other trademarks belong to their respective owners.

### LI-COR Biosciences

4647 Superior Street  
Lincoln, NE 68504  
Phone: +1-402-467-0700  
Toll free: 800-645-4267  
[biosales@licor.com](mailto:biosales@licor.com)  
[licor.com/bio](http://licor.com/bio)

### Regional Offices

LI-COR Biosciences GmbH  
Siemensstraße 25A  
61352 Bad Homburg  
Germany  
Phone: +49 (0) 6172 17 17 771  
[bio-eu@licor.com](mailto:bio-eu@licor.com)

LI-COR Biosciences UK Ltd.  
St. John's Innovation Centre  
Cowley Road • Cambridge  
CB4 0WS • United Kingdom  
Phone: +44 (0) 1223 422104  
[bio-eu@licor.com](mailto:bio-eu@licor.com)