Revised: August 26, 2022

Product Information

4X Protein Loading Buffer with Orange Tracking Dye

Catalog Number: 40136

Unit Size: 15 mL

Storage and Handling

Store at room temperature. Product is stable for at least 12 months from date of receipt when stored as recommended.

Product Description

4X Protein Loading Buffer with Orange Tracking Dye is a convenient loading buffer for protein gel electrophoresis. The loading buffer contains an orange tracking dye that is recommended for fluorescent gel and western blot applications because it avoids unwanted background fluorescence caused by blue tracking dyes in far-red and near-infrared detection channels. The loading buffer is compatible with both visible fluorescent and near-IR fluorescent gel and western blot imaging.

Instructions for Use

This loading buffer is formulated for denaturing SDS-PAGE. Before use, warm buffer slightly until any SDS crystals disappear. The buffer may be warmed at 37°C to redissolve crystals if needed.

Note: If you wish to use Protein Loading Buffer at a different concentration (e.g., 2X), you may dilute the 4X buffer in dH_2O to the desired concentration and store at room temperature. Scale volumes in your protocol accordingly so that the loading buffer is at 1X final concentration in your sample.

Materials required but not provided

- Beta-mercaptoethanol (BME) or 1M DTT in dH_2O (optional for reducing gel electrophoresis)

1. Optional: For reducing gel electrophoresis, prepare reducing loading buffer by adding BME or 1M DTT to an aliquot of 4X Protein Loading Buffer at a ratio of 1 part reducing agent to 9 parts loading buffer (e.g., add 10 uL of BME or 1M DTT to 90 uL of 4X loading buffer).

   Note: The working solution with reducing agent should be prepared on the day of use.

2. Add 4X Protein Loading Buffer (with reducing agent, if using) to your protein samples at a ratio of 1:3 (e.g., add 4 uL of loading buffer to 12 uL of protein sample). Mix well by gently vortexing the sample vial.
3. Denature the protein samples by heating to 95°C for 5 minutes, or by following your standard protocol.
4. Load the protein samples onto the gel and perform electrophoresis according to your standard protocol. Electrophoresis should be stopped when the dye front reaches the bottom of the gel.

Related Products

Cat. No.	Product
23013	TrueBlack® WB Blocking Buffer Kit
33025, 33026	VersaBlot™ Total Protein Normalization Kits
21530	Peacock™ Prestained Protein Marker
21531	Peacock™ Plus Prestained Protein Marker
20065	CF®680 Goat Anti-Mouse IgG (H+L), Highly Cross-Adsorbed
20067	CF®680 Goat Anti-Rabbit IgG (H+L), Highly Cross-Adsorbed
20192	CF®680R Goat Anti-Mouse IgG (H+L), Highly Cross-Adsorbed
20193	CF®680R Goat Anti-Rabbit IgG (H+L), Highly Cross-Adsorbed
20077	CF®770 Goat Anti-Mouse IgG (H+L), Highly Cross-Adsorbed
20078	CF®770 Goat Anti-Rabbit IgG (H+L), Highly Cross-Adsorbed
20342	CF®790 Goat Anti-Mouse IgG (H+L), Highly Cross-Adsorbed
20343	CF®790 Goat Anti-Mouse IgG (H+L), Highly Cross-Adsorbed
22014	Bovine Serum Albumin 30% Solution
22010	10X Fish Gelatin Blocking Agent
22012	Dry Milk Powder
22001	Ponceau S solution
22002	Tween® 20
30071	AccuOrange™ Protein Quantitation Kit
33021, 33022	GloMelt™ Thermal Shift Protein Stability Kit
21003	One-Step Blue® Protein Gel Stain
21004	One-Step Lumitein™ Protein Gel Stain
21005	One-Step Lumitein™ UV Protein Gel Stain
41024-4L	Water, Ultrapure Molecular Biology Grade

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