

Protein Loading Buffer (SDS, 4×)

REF: EG21323S

Storage Condition

Store at -20°C for at least one year, at 4°C for at least 3 months, and at room temperature for at least 1 month.

Components

Component	Amount
Protein Loading Buffer (SDS, 4×)	5×1 ml

Description

This product is a loading buffer for protein samples with SDS-PAGE (sodium dodecyl sulfate polyacrylamide gel electrophoresis). It contains the tracking dye Coomassie Brilliant Blue G250, which allows for monitoring the procession of electrophoresis. This product includes the reducing agent TECP, and does not contain toxic or irritating substances such as DTT or mercaptoethanol. After electrophoresis, staining with Coomassie Brilliant Blue or silver staining methods allows for clear visualization of the protein bands. The migration rate of proteins is inversely proportional to their molecular weight; smaller proteins migrate faster.

Protocol

Remove this product from the refrigerator and dissolve the precipitate completely at room temperature or at a temperature not exceeding 37°C, avoiding prolonged exposure to heat. Based on the volume of the protein sample and the well of the gel, adjust the amount of this product according to the ratio of 1 µl of Protein Loading Buffer (SDS, 4×) per 3 µl of protein sample. Mix the protein sample with the protein loading buffer, heat at above 85°C for 3~10 min to fully denature the proteins. After cooling to room temperature, directly load the sample into the wells of the SDS-PAGE gel. Stop electrophoresis when the blue dye reaches near the bottom of the gel.

Notice

1. Protein Loading Buffer (SDS, 4×) contains a reducing agent, but does not contain the highly toxic compound mercaptoethanol.
2. Protein Loading Buffer (SDS, 4×) must be completely dissolved before use. Brief and repeated heating for dissolution does not affect its functionality.
3. This product contains a high concentration of SDS. It may precipitate and form flocculent material when stored at low temperatures, which is a normal occurrence. Thoroughly dissolve the material upon warming before normal use. After dissolution, please aliquot appropriately to avoid contamination and degradation.
4. This product is intended for research purposes by professionals and should not be used for clinical diagnosis or treatment, food, or pharmaceuticals. It should not be stored in residential areas.
5. For your safety and health, please wear lab coats and disposable gloves when handling this product.