

5× protein loading buffer (containing sulfhydryl reducing agent)

Item No. : P1041

Specification: 10mL

Storage: -20°C storage, it is recommended to separate frozen storage, to avoid repeated freezing and thawing. Valid for 12 months.

Product Description:

This product is suitable for SDS-PAGE(SDS denatured polyacrylamide gel electrophoresis) as a protein sample. Its main ingredients are SDS, sulfhydryl reducing agent, bromophenol blue, buffer salt solution and so on.

SDS can combine with protein to make protein-SDS complex with a large amount of negative charge, then the charge of the protein itself is completely covered by SDS, eliminating the difference in the charge of various proteins itself, SDS can also break the intramolecular and intermolecular hydrogen bond, destroy the secondary and tertiary structure of protein molecules. β -mercaptoethanol can break the disulfide bond between cysteine residues, destroy the quaternary structure of proteins, and eliminate the difference between protein structures. Ultimately no charge and structurally different proteins (subunits), electrophoresis speed is only related to the size of its molecular weight. Bromophenol blue is used as an indicator during electrophoresis, giving an approximate indication of the end time of electrophoresis.

Instructions for use (for informational purposes only) :

1. Please use the ratio of 10 μ L loading buffer per 40 μ L protein sample (5 times dilution). If the protein concentration is too high, double dilution can be used.
2. After mixing, heat the 100°C water bath for 3-5 minutes to denature the protein.
3. After cooling to room temperature, centrifuge at 10000-14000 rpm for 2-5 minutes, take the supernatant directly onto the sample for electrophoresis.

Points for attention:

1. When the concentration of polyacrylamide gel is 8%, the position of the bromophenol blue indicator strip is about 30kd, when the glue concentration is 12%, it is about 20kd, and when the glue concentration is 15%, it is about 10kd. Please judge the electrophoretic time according to your target strip.
2. This reagent is toxic because it contains sulfhydryl reducing agents. For your safety and health, please wear a lab coat and disposable gloves.

Related products:

- P1015 4×Protein Loading buffer (DTT included)*
P1017 4×non-denatured protein loading buffer
P0012 10×Ponceau stain solution
P1300 Coomassie Brilliant Blue Quick Dyeing Solution
P1200 SDS-PAGE Gel preparation kit
PR1700 prestain with secondary high molecular weight protein Marker

Related literature:

- [1] Zhihui Wang,Zhiquan Zhu,Zhong Lin,et al. miR-429 suppresses cell proliferation, migration and invasion in nasop -haryngeal carcinoma by downregulation of TLN1. Cancer Cell International. April

2019. (IF 3.439)

- [2] Youbing Tu, Yubing Liang, Yong Xiao, et al. Dexmedetomidine attenuates the neurotoxicity of propofol toward primary hippocampal neurons in vitro via Erk1/2/CREB/BDNF signaling pathways. Drug Design, Development and Therapy. February 2019. (IF 3.486)

Note: For more information about this product, please refer to the Solebault website.