

MES-SDS Running Buffer

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1. Product Description

1.1 Features of MES-SDS Running Buffer

MES-SDS Running Buffer (powder formulation) is an optimized electrophoresis buffer perfectly matched for the Bis-Tris (polyacrylamide gel) buffer system. This product is recommended for the separation of medium to low molecular weight proteins. Utilizing proprietary technology, MES-SDS Running Buffer offers a long shelf life, high resolution, fast electrophoresis, and compact size.

Achieve ideal protein separation by choosing the appropriate buffer.

Both MOPS SDS Running Buffer and MES SDS Running Buffer can be used in Bis-Tris gel electrophoresis. Currently, MOPS-SDS Running Buffer is suitable for use with our XPAGE™ and FuturePAGE™ precast gels. MES-SDS Running Buffer is suitable for use with our FuturePAGE™ HP precast gels. Differences in ion migration effects between different buffers affect protein stacking, consequently leading to variations in protein separation ranges.

MES SDS Running Buffer runs faster than MOPS SDS Running Buffer, primarily due to the lower pKa of MES, which increases the migration speed of proteins in the electric field. When using MOPS buffer, protein migration is slower compared to using MES buffer.

1.2 Formulation of MES-SDS Running Buffer

The formulation of MES-SDS Running Buffer is shown in Table 1.

Table 1: MES-SDS Running Buffer Formulation

Ingredient	Amount
Tris base	50mM
MES	50mM
SDS	0.10%
Disodium Ethylenediaminetetraacetate	1mM

2. Operation Procedure

Dissolve the contents of one pouch in 1000 mL of deionized water. Stir thoroughly using a magnetic stirrer until the Running Buffer becomes clear. It is ready for use without pH adjustment.

3. Precautions

- 3.1 This product is supplied as powder pouches. Store at room temperature. Shelf life is 2 years.
- 3.2 This Running Buffer contains SDS and is suitable for denaturing gel protein electrophoresis.
- 3.3 Not suitable for polyacrylamide gels using buffer systems such as Tris-Glycine.
- 3.4 Please empty the powder pouch first, then rinse the pouch with an appropriate amount of deionized water to dissolve any residual powder completely.
- 3.5 Prepared Running Buffer can be recovered and reused (recommended not to exceed 3 cycles). For optimal electrophoresis results, do not use recovered buffer.
- 3.6 Store prepared Running Buffer at 4-25°C (room temperature).
- 3.7 For your safety and health, please wear a lab coat, disposable gloves, and a mask during operation.
- 3.8 MOPS buffer may be irritating to skin and eyes. In case of accidental contact, rinse immediately with plenty of water and seek medical attention.
- 3.9 This product is for research use only. Do not use for clinical diagnosis .

4. Related products

Product	Cat.No.	Size
MES-SDS Running Buffer	BR0002-01	5 PKs/Box