

SOP: R009

SDS-PAGE 10X Tricine Running Buffer

Materials and Reagents:

1. Clean 2L White -Top Nalgene Container (Cat.# Fisher 02-963-2A)
2. 1L Graduated Cylinder
3. 1L beaker
4. Stir-Bar and Magnetic Stir-Plate
5. 900 ml Milli-Q H₂O
6. 121 g Tris-base (also called Trizma base)
7. 179 g tricine
8. 10 g SDS

Protocol: (note 1)

1. ____ Clean the 10X Tricine Buffer container and rinse with Milli-Q H₂O (note 2).
2. ____ Measure 900 ml of Milli-Q H₂O with the 1L graduated cylinder.
3. ____ Pour Milli-Q water into a 1L beaker.
4. ____ Weigh out 121 g of Tris-base (Trizma-base).
5. ____ Add the Tris-base to the 900 ml of Milli-Q H₂O.
6. ____ Place magnetic Stir-Bar into the beaker and mix using Stir-Plate.
7. ____ Weigh out 179 g of tricine.
8. ____ When the Tris-base is dissolved, add the tricine and dissolve.
9. ____ Weigh 10 g of SDS (note 3).
10. ____ Add the SDS to the buffer mixture and stir until dissolved.
11. ____ Pour the buffer into a 1L graduated cylinder.
12. ____ Add Milli-Q H₂O until the volume is 1000 ml and continue to stir to ensure proper mixing.
13. ____ Pour 10X buffer into the 2L Nalgene container.
14. ____ Ensure that the container is labeled "SDS-PAGE Tricine Running Buffer" and write your initials and the date on a piece of tape and place on container.

Notes:

1. Always make sure to wear gloves when preparing buffers.
2. The 2L and 10L Nalgene carboys (Fisher Catalog # 02-962-053A, and 02-963-2A) used for this buffer should be dedicated for this purpose.
3. Always wear a mask when weighing SDS to avoid inhalation.

References:

Invitrogen Novex Pre-Cast Gel Instruction Booklet p. 21, each box of pre-cast gels comes with this booklet.