

UltraScience Precut PVDF Membrane Sandwiches

30 AGU 2024

| Catalog Number | Quantity | Size |
|----------------|----------|-----------------|
| MMP01-S020(N) | 20 units | 7.3 cm x 8.3 cm |
| MMP02-S020(N) | 20 units | 8.5 cm x 14 cm |

Storage Conditions

Stable for up to 24 months at 25°C.

Description

For analyzing the small amounts of proteins (down to 10 pmoles), peptides or amino acids, polyvinylidene difluoride (PVDF) membranes are the most ideal item for tracing down these transferred small molecular weight materials after electroblotting. The UltraScience Precut PVDF Membrane Sandwiches, 0.2 μm , have excellent binding properties for western blotting, dot-blot assays, and other protein or nucleic acid methods such as protein sequencing.

Kit Content(s)

| | |
|----------------------------------|--------------|
| One blue separator on top | |
| One filter paper on top | |
| 0.2 μm PVDF membrane | 20 units/box |
| One filter paper on the bottom | |
| One blue separator on the bottom | |

Specifications

| Item | MMP01-S020(N) | MMP02-S020(N) |
|------------------------------|--------------------------------|----------------|
| Dimensions/Size | 7.3 cm x 8.3 cm | 8.5 cm x 14 cm |
| Material | PVDF membrane | |
| Wettability | Hydrophobic | |
| Thickness | 140~150 μm | |
| Pore Size | 0.2 μm | |
| BSA Protein Binding Capacity | ~200 $\mu\text{g}/\text{cm}^2$ | |

Material required but not provided

- Transfer tank
- Powder supply
- Transfer buffer
- Alcohol (methanol, ethanol, or isopropanol)

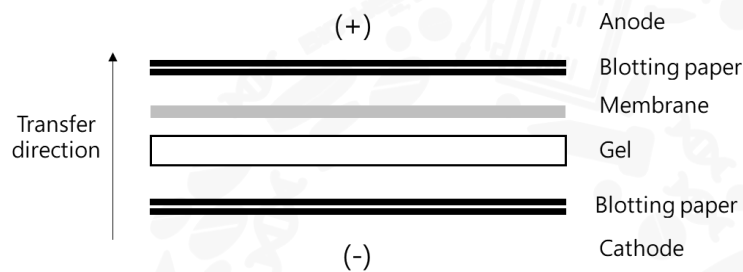




Method

The PVDF membrane is supplied between two pieces of pre-cut filter papers. The filter paper may be used as part of the blot 'sandwich'. All the washing steps should be performed in a shallow dish with constant shaking.

1. Remove the gel from the electrophoresis unit and soak the gel in a cold transfer buffer evenly for 30 minutes.
2. Remove the blue separator papers and soak the PVDF membrane in 100% alcohol (methanol, ethanol, or isopropanol) for 15 seconds. Ensure the entire PVDF membrane is fully saturated without any dry areas to prevent the further inhibition of protein transfer.
3. Place the PVDF membrane and filter papers in a new container and equilibrate them with transfer buffer for 15 to 20 minutes.
4. Assemble the blot 'sandwich' according to the instructions provided by the manufacturer of your blot apparatus and transfer.



5. Prevent the bubbles appearing between the membrane and the gel.
6. Connect the leads and the transfer tank to start the transferring step with the suggestive set up of 45-90 minutes at 0.8 mA/cm² of the gel.
Transfer time and efficiency are based on several factors, including the concentration of polyacrylamide, the thickness of the gel, the presence of SDS or organic solvents, the pH and ionic strength of the transfer buffer, and the molecular weight of the target proteins. It is recommended to determine the optimal transfer conditions empirically.
7. After transfer, rinse the PVDF membrane with water and proceed it to immunoblotting or staining. Keep the membrane moistened until the next staining step.
8. Stain the PVDF membrane with 10-20ml of Ponceau S Solution on each membrane.

