



## UltraScience Precut PVDF Membrane Sandwiches

10 SEP 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  $\mu\text{m}$ , 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 $\mu\text{m}$ 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 $\mu\text{m}$	
Pore Size	0.2 $\mu\text{m}$	
BSA Protein Binding Capacity	~300 $\mu\text{g}/\text{cm}^2$	

### Material required but not provided

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

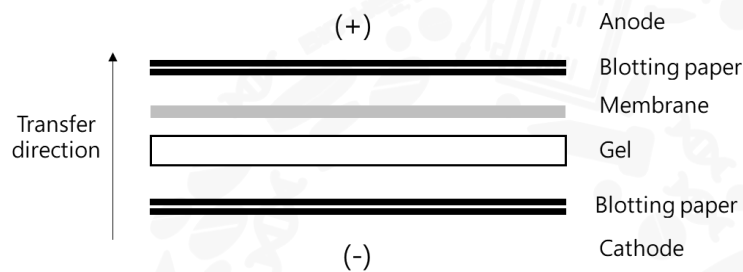




## Method

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/cm<sup>2</sup> 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.

