HiFiBloE™ PVDF Membrane for Blotting

Product Code	Pore size	Dimension	Pack size
MBM004-1RL	0.2µm	26 cm x 3.3 m	1roll
MBM005-20SH	0.2µm	7 cm x 8.5 cm	20sheet

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PVDF (Polyvinylidene Difluoride) membrane is a matrix used in protein blotting assays having high capability to immobilize proteins. HiMedia's HiFiBloE™ PVDF Membrane for Blotting is a hydrophobic membrane with specially designed porous structure and binding sites which provide enormous support during the transfer of both proteins and abundantly used in Western blotting procedures. It ensures highest binding capacity and performance in biomolecule detection. This membrane acts as microporous substrates to which proteins bind through hydrophobic interactions. It provides fast binding and steady support. PVDF is more suitable for detecting higher molecular weight proteins. The pore size of 0.2 µm is optimized for transfer of proteins through the membrane. The smaller pore size minimizes low molecular–weight protein sample loss during the blotting procedure. This membrane is compatible with a variety of detection methods such as chemiluminescence, chromogenic, and fluorescence.

HiFiBloE™ PVDF Membrane is available in different formats of varing sizes like rolls, precut sheets, etc. Rolls (MBM004) offer a larger surface area of membrane, offering flexibility to cut the membrane as per the requirement whereas precut sheets (MBM005) offer easier usage for standard mini gel transfers.

Special Features:

1. Superior binding capacities of proteins.
2. Higher mechanical strength and superior chemical resistance.
1. Minimum background interference:
   Excellent signal to noise ratio.
2. Easy to handle, wets readily with aqueous solutions.
3. Compatible with all standard immunoblotting detection methods.
4. Compatible with common stains like Ponceau-S stain.
5. Better sensitivity and less brittle than nitrocellulose membrane.

Applications:

1. Protein immunoblotting
2. Dot blots
3. Protein sequencing
4. Amino Acids analysis

Specifications:

Appearance	White film with backing
Pore Size	0.2 µm
Dimensions	MBM004 - 26 cm x 3.3 m
	MBM005 - 7 cm x 8.5 cm
Protein Binding Capacity	≈Over 200 µg/cm^2

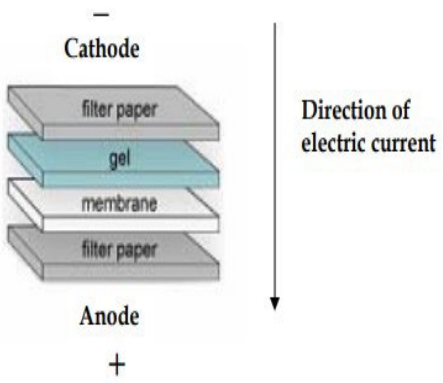
General Instructions:

- Always wear gloves while handling the membrane, in order to avoid fingerprints.
- Use blunt forceps while handling the membrane to prevent damage.
- Ensure proper wetting of the membrane.

Preparation before performing electro-transfer:

1. Cut a piece of PVDF transfer membrane of required size.
2. Immerse the membrane into methanol for 15 seconds.
3. Immerse the membrane into sterile distilled water for 2 minutes.
4. Finally, immerse the membrane into 1X transfer buffer for 15 minutes. Immersing the membrane into methanol ensures the activation of hydrophobic sites for protein binding. The later steps ensure the proper wetting of membrane for Wet electro-transfer method

General Assembly Using PVDF Membrane for Immunoblotting:



HiFiBloE™ PVDF Membrane offers high sensitivity for Protein Detection

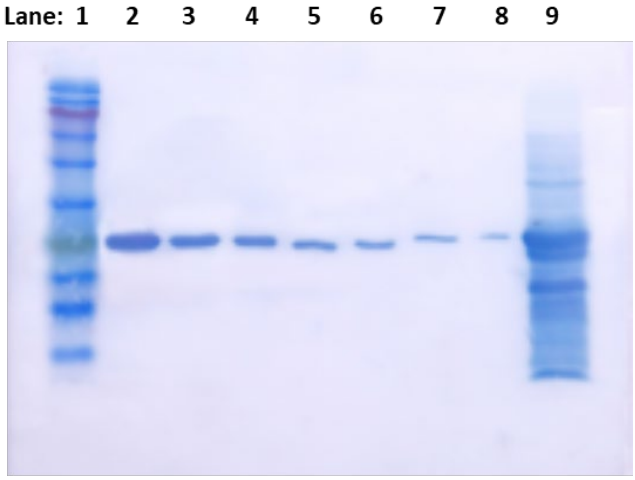


Fig A: HiFiBloE™ PVDF membrane after electrotransfer and immunodetection

Fig A: Immunoblot after electro-blotting. Bacterial cell lysate containing overexpressed GST protein was electrophoresed on SDS-PAGE gel using Wee Vert® (LA1070) and blotted using Wee Blot™ unit (LA1088) onto PVDF membrane followed by immunodetection using anti-GST antibody.

Lane 1: Prestained Protein Ladder
Lane 2 to 9: Protein samples of varying concentrations

Target Protein: GST- Tagged Protein with approx. molecular weight of 26kDA.

- **Transfer Conditions:** 150V, 300mA for 120 minutes.
- **Wash Solution:** TBST (0.1%)
- **Chromogenic Substrate:** TMB Substrate Solution

Storage: HiFiBloE™ PVDF Membrane for Blotting can be stored at 10-30°C.

Stability: HiFiBloE™ PVDF Membrane is stable for 2 years when stored as directed.

Limitations

- Proteins might not transfer properly onto the membrane if the membrane is dry.
- Development of protein bands depends upon the samples taken for detection, detection method used and the concentration of antibodies.
- Contamination of membrane due to the transfer of proteins from fingerprints onto the membrane.

Recommended products to use with HiFiBloE™ PVDF Membrane for blotting:

Product Code	Product Name
ML043	10X Transfer Buffer
ML056	10X Tris-Glycine Buffer, pH 8.3
ML044	Blocking Buffer
ML184	Blocking Buffer (1% BSA in1X PBS)
ML248	Blocking Buffer (3% BSA in1X PBS)
ML186	Blocking Buffer (1% BSA in1X TBS)
ML183	Blocking Buffer (10% BSA in 1X PBS)
ML185	Blocking Buffer (10% BSA in1X TBS)
ML045	Ponceau-S Stain
ML088	10X TBST
ML163	Stripping Buffer
ML169	TMB Substrate Solution (For Western Blotting)
ML259	HiSensiFluor™ ECL substrate (FemtoPlus, for Western blotting)
LA1070	Wee Vert®
LA1088	Wee Blot™
MB113	Methanol
MBT092	Prestained Protein Ladder
MBT210	Prestained Protein Ladder (10 to 180 kDa)

Technical Assistance:

At HiMedia we pride ourselves on the quality and availability of our technical support. For any kind of technical assistance, mail at mb@himedialabs.com.

Symbol:

	Manufacturer		Do not use if package is damaged
	Batch code		Temperature limit
	Date of manufacture (YYYY-MM)		Consult instructions for use
	Use-by date (YYYY-MM)		Catalogue number

Identification No.: PIMBM004/MBM005
Rev No.: 04
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