

## HiFiBloE™ Nitrocellulose Membrane for Blotting

Product Code	Pore size	Dimension	Pack size
MBM014-1RL	0.45µm	30 cm x 3 m	1roll
MBM016-20SH	0.45µm	15 cm x 15 cm	20sheet
MBM017-20SH	0.45µm	20 cm x 20 cm	20sheet



Nitrocellulose membrane is a matrix used in protein and nucleic acids blotting assays having high capability to immobilize proteins or nucleic acids. HiMedia's HiFiBloE™ Nitrocellulose Membrane for Blotting is composed of pure nitrocellulose with specially designed porous structure and binding sites which provide enormous support during the transfer of both proteins and nucleic acids and abundantly used in Western and Southern blotting procedures. It ensures highest binding capacity and performance in biomolecule detection. This membrane acts as microporous substrates to which proteins and nucleic acids bind through hydrophobic interactions. It provides fast binding and steady support. The 0.45-µm pore size is ideal for the transfer of most proteins (>20 kDa) and nucleic acids (>300 bp). This membrane is compatible with a variety of detection methods such as chemiluminescence, chromogenic, and fluorescence.

HiFiBloE™ Nitrocellulose Membrane is available in different formats of varying sizes like rolls, precut sheets, etc. Rolls (MBM014) offer a larger surface area of membrane, offering flexibility to cut the membrane as per the requirement whereas precut sheets (MBM016, MBM017) offer easier usage for standard mini gel transfers.

**Special Features:**

1. Superior binding capacities of nucleic acid molecules and proteins
2. Minimum background interference: Excellent signal to noise ratio
3. Easy to handle, wets readily with aqueous solutions.
4. Compatible with all standard immunoblotting and protein & nucleic acid detection methods.
5. Compatible with common stains like Ponceau-S stain.

**Applications:**

1. Protein immunoblotting
2. Southern blotting
3. Dot and slot blots
4. Replica plating

**Specifications:**

Appearance	White film with transparent backing
Pore Size	0.45 µm
Dimensions	MBM014 - 30 cm x 3 m
	MBM016 - 15 cm x 15 cm
	MBM017 – 20 cm x 20 cm
Thickness	≈120 – 150 µm
Protein Binding Capacity	BSA: ≈90 µg/cm <sup>2</sup>

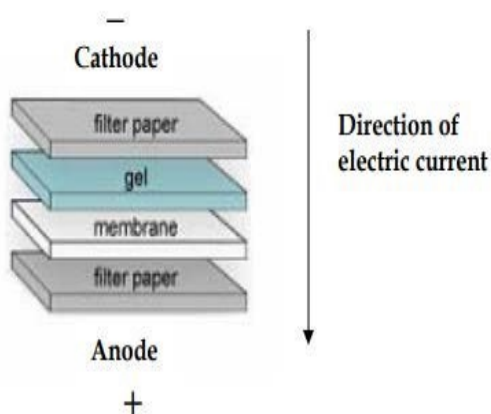
**General Instructions:**

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

**Preparation before performing electro- transfer:**

The nitrocellulose membrane must be soaked in 1X Transfer Buffer or deionized water prior to transfer. This ensures that the membrane is wet sufficiently for maximum binding of protein and nucleic acids as dry membrane promotes low binding of proteins and nucleic acids.

## General Assembly Using Nitrocellulose Membrane for Immunoblotting:



## HiFiBloE™ Nitrocellulose Membrane offers high sensitivity for Protein Detection

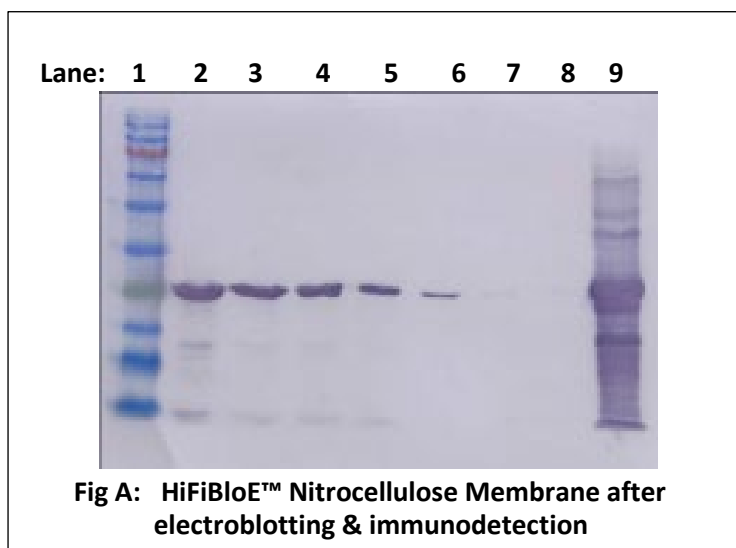


Fig A: Immunoblot after electro-blotting. Bacterial cell lysate containing overexpressed GST protein was electrophoresed on SDS-PAGE gel using Wee Vert® (LA1070) and blotted using Wee Blot™ unit (LA1088) onto Nitrocellulose membrane followed by immunodetection using anti-GST antibody.

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

- **Target protein:** GST-Tagged protein of molecular weight about 26 kDa.
- **Transfer Conditions:** 150V, 300mA for 120 minutes.
- **Wash Solution:** TBST (0.1%)
- **Chromogenic Substrate:** TMB Substrate Solution

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

**Warning:** Nitrocellulose is highly flammable; keep it away from direct heat.

**Stability:** HiFiBloE™ Nitrocellulose 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 Hi-FiBloE™ Nitrocellulose 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)
ML209	HiPurA® Fast southern Hybridization Buffer
ML210	HiPurA® Fast Western Blotting Buffers
ML259	HiSensiFluor™ ECL substrate (FemtoPlus, for Western blotting)
MBT092	Prestained Protein Ladder
MBT210	Prestained Protein Ladder (10 to 180 kDa)
LA1070	Wee Vert®
LA1088	Wee Blot™
MB113	Methanol

**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](mailto: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.: PIMBM014/MBM016/MBM017

Rev No.: 07

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**Disclaimer :**

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