

Binding Membranes for Molecular Biology

mdi binding membranes are uniform, paper thin, white plastic supports, having specially designed porous structures and binding sites suitable for transfer and hybridization of biological molecules.

mdi offers a wide range of binding membranes viz. Nitrocellulose, Nylon-66, and PVDF, exhibiting a range of properties to suit various applications.

Special features

- ◆ High binding capacities for the transferred molecules
- ◆ Good wettability for Nitrocellulose and Nylon-66 membranes
- ◆ PVDF membranes are hydrophobic
- ◆ Ability to retain the molecules without affecting its biological activity
- ◆ Chemical compatibility and mechanical durability
- ◆ Ability to be blocked by simple procedures
- ◆ High signal to noise ratio

For special applications, **mdi** offers internally supported binding membranes which exhibit very high mechanical strength.

Nitrocellulose Membrane Type - SCN and SCNJ

SCN

Pure nitrocellulose membrane produced specially for life sciences applications.

SCNJ

Internally supported to offer superior handleability.

Characteristics

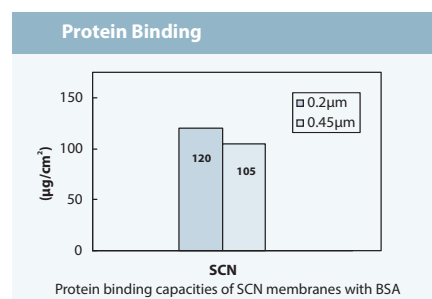
- ◆ High binding capacities for proteins and nucleic acid molecules
- ◆ Minimum background: High signal to noise ratio
- ◆ Uniform and easy wettability
- ◆ Can be blocked by normal blocking methods
- ◆ Does not bind common protein stains
- ◆ Compatible with colorimetric, radiolabelled, chemiluminescent, fluorescent, and staining detection methods

Applications

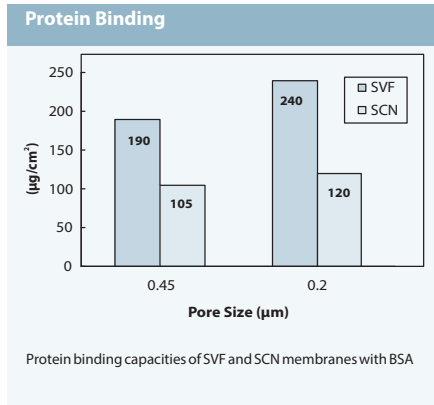
- ◆ Protein blotting
- ◆ Dot and slot blots
- ◆ Nucleic acid dot/slot blots
- ◆ Colony/plaque lifts
- ◆ Enzyme immunoassays

Packaging

Sealed in aluminum bags to maintain hydrophilicity and high protein binding on prolonged storage. The separators are of pure polyester film to avoid any contamination of the membrane from the separator.



PVDF Membrane- Type SVF



mdi Polyvinylidene fluoride (PVDF) membrane is a naturally hydrophobic support matrix which offers much higher protein binding capacities than that of Nitrocellulose membrane and also binds difficult to bind proteins such as glycoproteins.

Characteristics

- ◆ Very high binding capacities
- ◆ Minimal background: High signal to noise ratio
- ◆ Remains flexible and non-brittle after processing
- ◆ Chemically resistant to harsh reagents making it a convenient matrix for protein sequencing
- ◆ Higher strength than pure nitrocellulose
- ◆ Compatible with all types of detection methods

Downstream Applications

- ◆ Ideal support matrix for protein sequencing
- ◆ For high performance, reproducible western blotting
- ◆ For protein staining, glycolipid detection and immunoblotting

Nylon-66 Membrane Type - SNNP and SNNPZ

SNNP: Internally supported Nylon-66 membranes

SNNPZ: Positively charged for enhanced binding of negatively charged molecules

Characteristics

- ◆ Very high binding capacities for nucleic acid molecules
- ◆ Easy wettability
- ◆ Ultraviolet cross linkable
- ◆ Chemically resistant; tolerant to alkali fixation

Applications

- ◆ Nucleic acid transfers
- ◆ Dot/slot blots
- ◆ Colony/plaque lifts
- ◆ Multiple reprobing

ORDERING INFORMATION

Type		Size		Pore Size		XX	XX	Sterile/ Non Sterile		Pack Size	
Type	Code	Dia	Code	Pore Size	Code				Code	Pack Size	Code
SCN	SCNX	82mm	13	0.2µm	01			Non Sterile	1	25	11
SCNJ	SCNJ	90mm	14	0.45µm	02					50	03
SVF	SVFX	137mm	20							Roll	01
SNNP	SNNP	142mm	16								
SNNPZ	SNPZ	80mm x 100mm	88								
		150 x 150mm	87								
		200 x 200mm	86								
		300 x 300mm	85								
		3M X 300mm	84								
		3M x 240mm	83								
		3M x 100mm	81								
		3M x 150mm	95								

* SVF, SNNP and SNNPZ are available in a maximum width of 240 mm
 ** SCNJ is available in a maximum width of 150mm

Example:

SCNJ	13	02	XX	XX	1	03
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Selection Chart

This selection chart highlights the suitability of various **mdi** membranes for different applications based on their properties.

Membrane Type	SCN	SCNJ	SNNP	SNNPZ	SVF
Biomolecules					
Nucleic Acids	R	R	HR	HR	NR
Proteins	HR	HR	R	R	R
Transfer Method					
Dot Blot	R	R	R	R	R
Colony or Plaque lift	HR	HR	R	R	NR
Electrotransfer	R*	R*	HR	HR	HR
Capillary Blot	R	R	R	R	R
Vacuum Blot	R	R	R	R	R
Alkaline Transfer	NR	NR	R	R	R
Molecule Fixation					
Baking	R	R	R	R	NR
Drying	R	R	R	R	R
UV Crosslinking	P	P	HR	HR	R
Alkali Fixation	NR	NR	R	R	R
Molecule Removal	NR	R	NR	NR	R
Detection Method					
Colorimetric	HR	HR	R	R	R
Radiolabelled	R	R	R	R	R
Luminescence	R	R	P	P	R
Fluorescence	R	R	P	P	R
Staining	R	R	P	P	R
Reprobing					
Once	NR	R	R	R	R
Multiple	NR	R	R	R	R

HR = **Highly Recommended**
R = **Recommended**
R* = **Recommended for Proteins only**
P = **Possible**
NR = **Not Recommended**