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BlueFlash Semi-Dry Blotter

For fast and gentle electrotransfer of proteins

The advantage of semi-dry blotting

In tank blotting large volume of electrically conductive buffer is used. Attempts to achieve high electric field strengths for rapid blotting lead to very high current demands and consequently large heat loads. In semi-dry blotting the closely spaced electrodes separated by less conductive saturated filter papers permit electro-transfer of proteins without high current. Semi-dry blotting is faster, generates less heat and requires less materials than tank blotting.

The buffer system

Both, discontinuous and continuous buffer systems can be applied. Discontinuous buffer systems are particularly recommended because transfer is very homogeneous for a wide range of molecular weights, even larger proteins up to 200 kDa can be transferred with an efficiency of > 80%.

Compact and save design

The BlueFlash Semi-Dry Blotters are equipped with corrosion-resistant, long-lasting electrodes made from synthetic carbon. They are resistant to corrosion (pH 3 – 9, SDS) and built for homogeneous, fast and efficient transfer of proteins. The spring-mounted anode can be adapted to thicker gels (up to 5 mm) and gel stacks; usually, stacks of 2 gels can be blotted. The acrylic housing is resistant to 10% ethanol and easy to clean. Safety lid, including design to prevent short-circuit (no gel). Little benchspace required.

Flexible format and application

Choose the right format for your application. SERVA offers semi-dry blotter units with various blotting areas ranging from small-sized BF-S and BF-M for mini gels up to large-sized BF-XXL to fit 2D gels. The sizes available suit all gel formats. They are suitable for blotting of large format gels (e.g. 2D) or simultaneous transfer of a series of mini gels. Depending on your application choose between five different formats.



- Efficient transfer even of large proteins
- Corrosion resistant carbon electrodes
- Five different formats for different gel formats

Specifications and Ordering Information

Product	BlueFlash Small	BlueFlash Medium	BlueFlash Large	BlueFlash X-Large	BlueFlash XX-Large
Blotting Area	10 x 10 cm	15 x 15 cm	28 x 28 cm	38.5 x 23.5 cm	38.5 x 38.5 cm
Operating range of constant current	0.8 – 3.5 mA				
Power supply requirements	200 V, 500 mA		200 V, 2 A		
Buffer volume	0.2 ml/cm ² x number of sheets + 1.0 ml/cm ² of membrane + 1.5 ml/cm ² of gel				
Apparatus dimensions	23 x 15 x 8.5 cm	28 x 20 x 8.5 cm	45 x 33 x 8.5 cm	43 x 37 x 8.5 cm	51 x 43 x 8.5 cm
Cat. No.	BF-S	BF-M	BF-L	BF-XL	BF-XXL

For blotting of nucleic acids and proteins

Blotting Membranes

For blotting of nucleic acids and proteins SERVA offers different types of transfer membranes. The table below shows which membrane is recommended for your application.

Application	Technique	Nitrocellulose (NC)	Nylon-Bind A	Nylon-Bind B	Fluorobind/Immobilon™-P
DNA	Capillary Southern Transfer		++	+++	
	Southern Transfer		++	+++	
	Alkaline Transfer			+++	
	Vacuum Transfer		++	+++	
	Dot Blot		++	+++	
	Sequencing Direct Blotting		++	+++	
RNA	Capillary Northern Transfer		++	+++	
	Electrotransfer		+++	+++	
	Vacuum Transfer		++	+++	
	Dot Blot		++	+++	
Proteins	Direct Staining with Anionic Dyes				+++
	Immunochemical Staining		++	+++	+++
	Western Transfer	+++	++	+++	+++
	Dot Blot	+++	++	+++	++
	Sequencing				+++
Bacteria Colonies	Colony and Plaque Lifts		++		
	Replica Plating		+++		

Nitrocellulose Membranes

Nitrocellulose membranes are the most popular membranes for Western, Southern and Northern blotting. The membranes bind both proteins and nucleic acids. Nitrocellulose membranes exhibit high binding capacity and has low background.

Product	Size	Quantity	Cat. No.
NC 45 Nitrocellulose Membrane, pore size 0.45 µm	88 mm x 88 mm	10 sheets	42516.01
	30 cm x 3 m	1 roll	71208.01
NC 2 Nitrocellulose Membrane, pore size 0.2 µm	20 cm x 20 cm	5 sheets	71223.01
	20 cm x 3 m	1 roll	71224.01

Nylon-Bind Membranes

Nylon-Bind membranes feature low background, high sensitivity and high binding capacities for blotting of proteins and nucleic acids. The higher inner surface of Nylon-Bind membranes is based on the unique microporous structure of the nylon material.

Product	Size	Quantity	Cat. No.
Nylon-Bind A Membrane, amphoteric surface, pore size 0.2 µm	30 cm x 3 m	1 roll	42566.01
Nylon-Bind A Membrane, amphoteric surface, pore size 0.45 µm	80 mm x 83 mm	10 sheets	42517.01
	10 cm x 10 cm	20 sheets	42564.01
	20 cm x 20 cm	10 sheets	42568.01
	30 cm x 3 m	1 roll	42567.01
Nylon-Bind B Membrane, amphoteric surface, pore size 0.45 µm	80 mm x 83 mm	10 sheets	42518.01
	10 cm x 10 cm	20 sheets	42565.01
	20 cm x 20 cm	10 sheets	42570.01
	30 cm x 3 m	1 roll	42569.01

Fluorobind/Immobilon™-P-Membranes

Fluorobind membranes are based on PVDF-type chemistry and are suited especially for protein blotting and protein sequencing. Immobilon™-P membranes, developed by Millipore Corp., are specially designed for Western blot techniques. The membranes, made of polyvinylidene fluoride, show excellent mechanical stability and are compatible with most staining procedures including immunological methods.

Product	Size	Quantity	Cat. No.
Fluorobind Membrane, surface PVDF, pore size 0.2 µm	10 cm x 10 cm	20 sheets	42573.01
	20 cm x 20 cm	10 sheets	42572.01
	25 cm x 3 m	1 roll	42571.01
Immobilon™-P-Membrane, pore size 0.2 µm	9 cm x 12 cm	10 sheets	42579.01
	26.5 cm x 3.75 m	1 roll	42574.01

