

Biochemicals
Electrophoresis
Bioseparation
Life Sciences
Specials

SDS PreNets™ Blotting Kit

Horizontal Precast Gels for SDS PAGE and Subsequent Blotting

Improved Gel System for SDS PAGE and Blotting

SERVA SDS PreNets™ Blotting gels provide a user-friendly concept for screening of proteins: they resolve small proteins (10 kDa) and large proteins (200 kDa) in the same gel and facilitate subsequent Western transfer. SDS PreNets™ Blotting gels are ready-to-go to conduct horizontal (flat bed) electrophoresis. After SDS PAGE, Western blotting is easily carried out due to Net-Fix™ built into the gel.

Net-Fix™ is a special, inert polyester net cast into the polyacrylamide matrix adding mechanical stability to the gel layer, mounted on a non-binding support film. After electrophoresis, the gel is lifted easily from the film backing and positioned directly onto the membrane of choice for blotting transfer. The risk of tearing or damage is omitted due to the stabilizing effect of the built-in Net-Fix™. Tedious, time-consuming removal of the gel layer (by scraping off the gel from its backing) is not necessary.

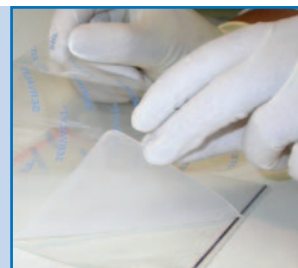
Handling of PreNets™ is identical in all steps to operating horizontal SDS gels cast covalently onto support film, including staining and drying. Of course, SDS PreNets™ Blotting gels can be used without applying blotting. When employing Western transfer, complete transfer of proteins is obtained with both methods, either semi-dry or tank blotting, at times similar to those found with other gels (self-cast, pre-cast).

Resolving Power Comparable to a Gradient Gel

SDS PreNets™ Blotting gels are prepared with a special buffer system providing resolving power comparable to gradient gels to separate small proteins (10 kDa) from large proteins (up to 200 kDa), (based on Ahn et al., Anal. Biochem. 291, (2001) pp. 300-303). The special gel buffer system of neutral pH adds to prolonged shelf life, which is at least 12 months.



Run horizontal SDS PAGE gel electrophoresis

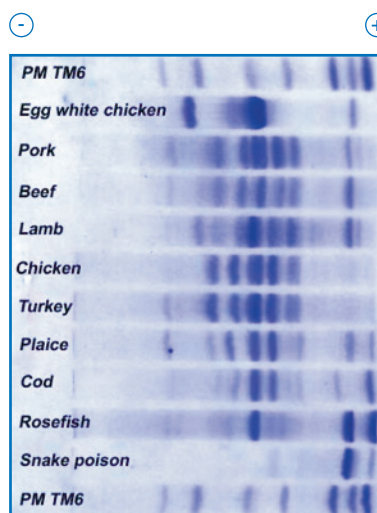


Lift the gel layer from the gel backing



Blot the proteins by semi-dry or tank blotting

The electrode buffer is delivered constantly to the gel during electrophoresis using paper wicks. The buffer composition is optimized to yield excellent resolution within approx. 9 cm of separating distance, at short running times of less than one hour. For high-throughput applications, the triple electrode method can be performed (4.5 cm separating distance), up to 48 samples can be processed simultaneously. Another benefit using the horizontal gel system is the very low consumption of buffer reagents which is particularly important for high-throughput screening or production of strips (Western blotting).



5 µg of marker proteins TM 6 (cat. no. 39207) and 10 µg of each meat sample separated on an SDS PreNet Blotting gel.

Conditions:
· const 30 mA
· 150 V (start)
· 500 V (end)

Time:
· 60 min

TECHNICAL NOTES

Electrophoresis

SDS PreNets™ Blotting Kit

Horizontal Precast Gels for SDS PAGE and Subsequent Blotting

- Excellent resolution 10 kDa to 200 kDa
- Easy handling in blotting procedures
- Minimum buffer consumption
- Neutral buffer system, long shelf life

Ease of Operation

Simple sample loading is obtained by using an applicator strip with slots, made from silicon. A selection of strips with varying number and shape of slots are available.

Standard protocols for staining SDS PAGE gels and blot membranes are applicable. SDS PreNets™ Blotting gels feature excellent staining and destaining properties as the gel layer is penetrated rapidly by the staining solution. Gels can be air-dried easily.

Two different gel sizes are available

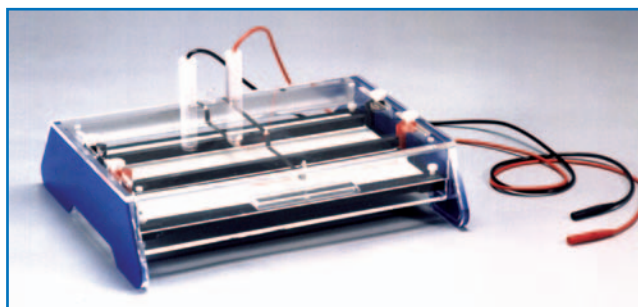
Format of 125 x 125 mm (typically, 12 samples can be loaded) and 245 x 125 mm (24 samples up to 48), most useful for high-throughput screening. Moreover, gels can be cut into smaller pieces – a very economic way to utilize the gel area if only a few samples need to be analyzed.

Ordering Information

The kit contains gels, buffers, wicks, applicator strip and a detailed instructions manual.

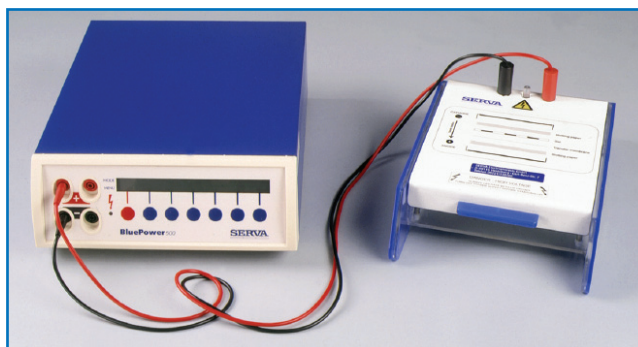
Product	Cat. No.	Gel Size	Quantity
SDS PreNets™ Blotting Kit	42700.01	125 x 125 mm	5
	42701.01	245 x 125 mm	5

BlueLine electrophoresis equipment to run SDS PreNets™ Blotting Gels



To run SDS PreNets™ Blotting use SERVA Flatbed System BlueHorizon™ Super Cool.

Product	Cat. No.
BlueHorizon™ Super Cool	BH-2C



To blot SDS PreNets™ Blotting gels upon completion of electrophoresis use SERVA BlueFlash™ Semi-Dry Blotter M.

BluePower™ 500 Power supply can be used to run both, the BH-2C flatbed system and the BF-M semi-dry blotter

Product	Cat. No.
BlueFlash™ M	BF-M
BluePower™ 500	BP-500



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