

2D HPE™ BlotGel

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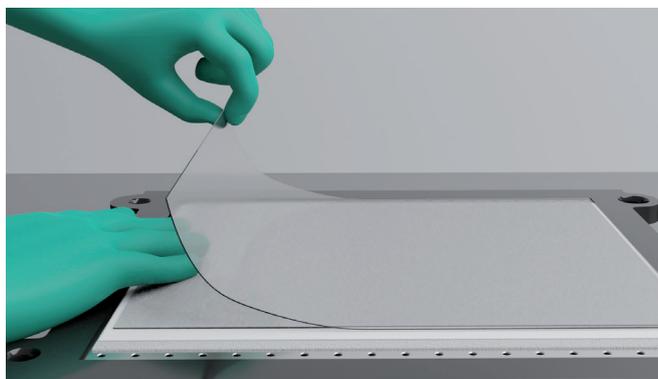
For high resolution 2D gel electrophoresis and Western blotting

The gel

The 2D HPE™ BlotGels are best suited for high resolution separation of proteins by 2D gel electrophoresis and subsequent blotting for different applications, especially for host cell protein (HCP) analysis by 2D Western immuno blotting. The non-fluorescent (NF) supporting film also provides best results for fluorescent staining and labelling.

Main advantages

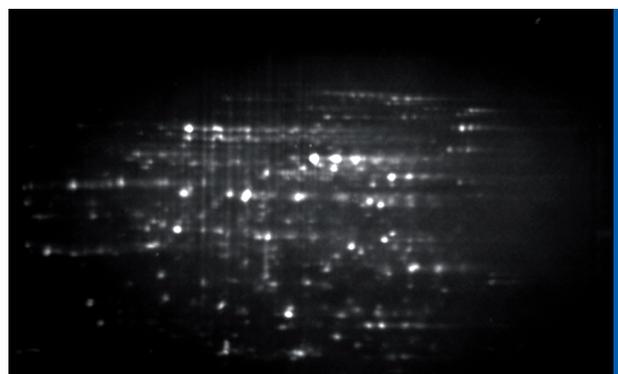
- **High resolution** – horizontal 2D electrophoresis of proteins on large format sized gels results in 20 % more spots compared to conventional vertical electrophoresis large gels
- **Semi-dry blotting of separated proteins** – transfer is easily done through innovative gel design by easy peeling off the support film from the gel in preparation of the blot after electrophoresis is completed
- **Efficient protein transfer** – achieve excellent transfer rates from gel to membrane with the SERVA BlueBlot Semi-Dry Blotter
- **Easy handling** – the non-covalent bounded support film allows damage-free handling of the gels during all steps of electrophoresis and Western blot preparation
- **Low buffer consumption** – extremely low amounts of running buffer are needed compared to traditional vertical electrophoresis
- **Available in three formats** – (1) large gel format for one 24 cm IPG strip (2) double gel format for two 11 cm IPG strips (3) triple gel format for three 7 cm IPG strips
- **Kit format** – contains 4 gels each with an overall dimension of 260 mm x 110 mm x 0.65 mm, electrode wicks and buffers



After electrophoresis the support film can be easily separated from the gel matrix

The idea

Analysing large-format, horizontal 2D gels by immunodetection has not been possible until now or only under very difficult conditions. The support film which is necessary to stabilize the gel during all handling processes in 2D gel electrophoresis makes a semi-dry blot impossible. Until now, the separation of gel matrix and support film was only possible by a laborious mechanical procedure, which often resulted in the gel with the separated samples being more or less destroyed.



Protein detection after Western blotting on membrane

The resolution

SERVA has found a solution to overcome this dilemma. In the 2D HPE™ blot gels, the gel matrix is covalently bonded to the support film via a narrow strip at the edge, while the majority of the gel only adheres non-covalently to the foil. Before transferring the proteins to the membrane by means of semi-dry Western blotting, the covalently bound strip can be cut off and the gel easily separated from the support film.

The application

An important application of 2D Western Blotting is the analysis of Host Cell Proteins (HCP), which can be done effortlessly with it.

Ordering Information

Product	Quantity	Cat. no.
2D HPE™ Large BlotGel NF 12.5 % Kit	1 kit	43432.01
2D HPE™ Double BlotGel NF 12.5 % Kit	1 kit	43430.01
2D HPE™ Triple BlotGel NF 12.5 % Kit	1 kit	43429.01