

Biochemicals

**Electrophoresis**

Bioseparation

Life Sciences

Specials

## SERVA IPG *BlueStrips*

Gel strips with immobilized pH-gradients

Since three decades SERVA is well known as a manufacturer of precast gels and carrier ampholytes (SERVALYT™). Derived from proprietary development and production, the new SERVA IPG *BlueStrips* for isoelectric focusing are available in different pH-ranges and lengths (see overleaf). Reproducible quality and high resolution of the gel strips are ensured by an especially developed process which allows to prepare gel strips with high accuracy and reproducibility, based on protocols published formerly by Prof. K. Altland (University Giessen).

### Product features

SERVA IPG *BlueStrips* are dried gel strips with immobilized pH-gradient used in high resolution 2D-gel-electrophoresis of proteins. The strips have to be rehydrated before use. The homogeneous polyacrylamide gel matrix is covalently bound to GEL-FIX™ to stabilize

the gel. Additionally, a non-binding cover film (GEL-FIX™ for Covers) protects the gel from damage and contamination. Each gel strip has its own lot number printed on and, therefore, is suitable for documentation according GMP/GLP.

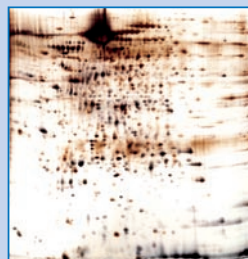


### Rehydration

The rehydration process is very simple. Strips are incubated in a buffer mixture containing SERVALYT™ for at least 6 hours (preferably over night). For many protein samples a common buffer to be used contains 8 M urea, 1% CHAPS, 13 mM DTT and 0.5% SERVALYT™ (the pH-range of the SERVALYT™ should correspond to the pH-range of the SERVA IPG *BlueStrip*, see overleaf).

### Sample application

The total protein content that can be applied to a SERVA IPG *BlueStrip* is 5 – 100 µg for a 7 cm gel strip, 50 – 300 µg for a 18 cm gel strip and 80 – 700 µg for a 24 cm gel strip. Samples can be loaded either by (I) the „sample in-gel hydration method“ (the sample is solved in the same buffer used for rehydration of the gel strip) or by (II) the „cup-loading method“ (the sample is applied via a small silicone cup placed on top of the rehydrated gel strip).



Separation of a protein sample (endometrium) in 2D-gel-electrophoresis by use of SERVA IPG *BlueStrips* 3 – 10. With friendly authorization of F. Berendt, Genzentrum, LMU Munich.

### Isoelectric focusing (IEF)

SERVA IPG *BlueStrips* can be operated in any commercially available electrophoresis apparatus suited for IEF. Typically, strips can be run in any flatbed system compatible with high-voltage applications (e. g. the flatbed system BH-2C from SERVA or the IEF100 unit as part of the large-sized 2D-GE system from Hoefer Inc., USA). Focusing time is depending on the voltage applied and on the length of the strip. A detailed user manual describes the procedure step by step and is delivered with each single package of SERVA IPG *BlueStrips*.

- **Consistent performance**

12 strips per package, all derived from same production lot

- **Reliability**

Accurate casting procedures ensures lot-to-lot reproducibility of pH-gradient

- **GMP/GLP-conformity**

Each strip has its individual lot number

# TECHNICAL NOTES

## Electrophoresis

## SERVA IPG *BlueStrips*

Gel strips with immobilized pH-gradients

### Ordering Information

Product	SERVA IPG <i>BlueStrips</i> (12 strips)*					
pH Range	3 – 10	3 – 10 NL	3 – 6	4 – 7	5 – 8	6 – 10
Length 7 cm	43001.01	43002.01	43005.01	43003.01	43006.01	43004.01
Length 11 cm	43031.01	43032.01	43035.01	43033.01	43036.01	43034.01
Length 17 cm	43041.01	43042.01	43045.01	43043.01	43046.01	43044.01
Length 18 cm	43011.01	43012.01	43015.01	43013.01	43016.01	43014.01
Length 24 cm	43021.01	43022.01	43025.01	43023.01	43026.01	43024.01
Product	Recommended for rehydration: <b>SERVALYT™</b> , 2 ml**					
pH Range	3 – 10	3 – 10 Iso-Dalt	3 – 6	4 – 7	5 – 8	6 – 9
Cat. No.	42940.04	42951.04	42944.04	42948.04	42949.04	42913.04

\* Each package contains 12 gel strips (all gel strips are 3 mm wide). Every gel strip has its own lot number and hence, can be traced distinctively, important for work conducted and in compliance to GMP/GLP. Other pH-gradients and gel strip lengths are available upon request.

\*\* Please find many other pH ranges (available at packing sizes of 10 ml, 25 ml and 100 ml) in the SERVA main catalogue or online ([www.serva.de](http://www.serva.de)).

## SERVA Related Reagents for Proteomics

### SERVA Gel™ TG 2D Gels

precast 2D gels in mini format (10 x 10 cm)

Product	Quantity	Cat. No.
SERVA Gel™ TG Vertical Tris-Glycine 2D Gel 10%	10 gels	43225.01
SERVA Gel™ TG Vertical Tris-Glycine 2D Gel 12%	10 gels	43226.01
SERVA Gel™ TG Vertical Tris-Glycine 2D Gel 14%	10 gels	43227.01
SERVA Gel™ TG Vertical Tris-Glycine 2D Gel 8 – 16%	10 gels	43228.01

### Trypsin NB Premium Grade, MS approved

from porcine pancreas, for highly specific protein digestion

Product	Quantity	Cat. No.
Trypsin NB Premium Grade, MS approved	4 x 25 µg	37384.01

### SERVA ICPL™ Kit

isotope-coded protein labelling for quantitative MS analysis of proteins

Product	Quantity	Cat. No.
SERVA ICPL™ Kit	1 kit (6 x 2 reactions)	39230.01
SERVA ICPL™ Triplex Kit	1 kit (6 x 3 reactions)	39231.01
SERVA ICPL™ Quadruplex Kit	1 kit (6 x 4 reactions)	39232.01
SERVA ICPL™ Quadruplex PLUS Kit	1 kit (6 x 4 reactions)	39233.01

### SERVA Protein Standards

for IEF, SDS PAGE and 2D-GE

Protein Standard	Application	Quantity	Cat. No.
IEF Marker 3 – 10, liquid mix	IEF (9 proteins/13 bands)	500 µl	39212.01
SERVA Unstained SDS PAGE Protein Marker 6.5 – 200 kDa, liquid mix	SDS PAGE (9 native proteins)	500 µl	39215.01
SERVA Prestained SDS PAGE Protein Marker 6.5 – 200 kDa, liquid mix	SDS PAGE (9 native proteins are stained blue)	2 x 250 µl	39216.01
SERVA Recombinant SDS PAGE Protein Marker 10 – 150 kDa, liquid mix	SDS PAGE (8 recombinant proteins)	500 µl	39217.01
SERVA Recombinant SDS PAGE Protein Marker 10 – 150 kDa PLUS, liquid mix	SDS PAGE (one additional protein at 29 kDa is stained blue)	500 µl	39218.01
SERVA Unstained Protein Standard III	SDS PAGE (10 recombinant proteins)	500 µl	39249.01
SERVA Dual Color Protein Standard III	SDS PAGE (10 recombinant proteins, proteins at 70 and 25 kDa are stained)	500 µl	39252.01
SERVA Chrom Protein Standard III (7 – 240 kDa)	SDS PAGE (10 proteins are stained in 6 colors)	500 µl	39255.01
SERVA Western Blot Protein Standard	SDS PAGE/ Western Blot (8 recombinant proteins, bind primary/secondary antibody)	250 µl	39256.01
SERVA Proteome Markers	2D-GE (8 proteins)	5 vials	39220.01

**SERVA**  
Electrophoresis

CRESCENT CHEMICAL COMPANY

2 Oval Drive, Islandia, NY 11749

Phone: 631-348-0333 · Fax: 631-348-0913

[crescent@creschem.com](mailto:crescent@creschem.com) · [www.creschem.com](http://www.creschem.com)

