# TECHNICAL NOTES | SERVA

**Biochemicals** 

**Electrophoresis** 

**Bioseparation** 

**Life Sciences** 

**Specials** 

# SERVALYT™ PRECOTES™/ **SERVALYT™ PreNets™**

Precast Gels for Isoelectric Focusing (IEF)

SERVA offers a broad range of precast polyacrylamide gels for horizontal IEF. The gel composition is 5 % T and 5 % SERVALYT™. Wide pH-range and narrow pH-range (2 pH units) are offered. Gels are available in two thicknesses, 0.3 mm and 0.15 mm. For most applications, the 0.3 mm gel thickness is recommended, gels of 0.15 mm thickness are advised when high resolution is required and low amount of sample material is available.



The polyacrylamide layer is either bound to a sturdy support GEL-FIX™, an inert polyester film activated to bind irreversibly to polyacrylamide, or to NetFix™, an inert net made of polyester fabric and activated to bind polyacrylamide. The permeable NetFix™ is particularly useful when blotting is applied after electrophoresis as it stabilizes the gel but does not interfere with transfer.

### **SERVALYT™ PRECOTES™**

The polyacrylamide gel layer of SERVALYT™ PRECOTES™ is bound covalently to GEL-FIX™ film. The gel will adhere to the support film during electrophoresis and in all subsequent staining, fixing and documentation procedures. There is no shrinking, swelling or tearing. The gel stays in its shape and can be easily stored for documentation.



#### SERVALYT™ PreNets™

Blotting of gels bound to support film cannot be performed without removal of the film backing (film is not permeable in electroblotting). But IEF gels are very thin and carry the risk to tear when being handled in blotting procedures.

SERVA developed the SERVALYT™ PreNets™ particularly for use in blotting. They are precast gels, used in the same manner as the related SERVALYT™ PRECOTES™ except that the gel, supported by the fabric, is permeable for electrotransfer. The gel layer is not covalently bound to the backing and is lifted off easily.

SERVALYT™ PreNets™ are particularly favourable in blotting experiments and in other assays which assess enzymatic activity of gel-separated proteins.

### Ready-to-use

SERVA precast gels are ready-to-use. Simply place the gel into the horizontal electrophoresis unit, apply buffersoaked electrode wicks and load the samples. SERVA precast gels are offered with thin and ultrathin gel layers. SERVA precast gels are each individually sealed in an Aluthen bag which adds to longevity (up to 18 months).

### Sample loading is quick and flexible

Samples are loaded by use of an applicator strip (made from silicon). Various strips differing in number and shape of slots are available from SERVA. The applicator strip can be positioned at any location on the gel samples can be loaded at optimum of solubility, anodically to mid-position to cathodically. Usually, an IEF run is completed within 3 hours (depending on gel size). Standard staining procedures apply (Coomassie<sup>™</sup>, silver), for protocols see www.serva.de. Gels can be air-dried over night at room temperature.



# **Electrophoresis**

## SERVALYT™ PRECOTES™/SERVALYT™ PreNets™

Precast Gels for Isoelectric Focusing (IEF)

# SERVA offers SERVALYT™ PRECOTES™ Kits for special applications

- I. SERVALYT™ PRECOTES™ CSF Kit for IEF of Cerebrospinal Fluid
- II. SERVALYT™ PRECOTES™ Hp Kit for IEF of Haptoglobin
- III. SERVALYT™ PRECOTES™ Tf Kit for IEF of Transferrin
- IV. SERVALYT™ PRECOTES™ PGM Kit for IEF in Phosphoglucomutase Subtyping
- V. SERVALYT™ PRECOTES™ IEF Starter Kit

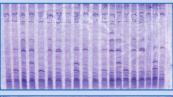
SERVALYT™ PRECOTES™ Kits contain gels, electrode wicks, applicator strips/pieces, anode and cathode buffer as well as detailed instructions for IEF and staining/detection.

### Benefits of the kits are

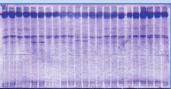
- · Easy-to-start, ready-to-use
- Gel and buffer composition optimized particularly for the application
- Large format (245 x 125 mm) for high throughput of samples in routine analysis, standard format (125 x 125 mm) for screening analysis



IEF of CSF using
SERVALYT™
PRECOTES™ CSF Kit



Haptoglobin subtyping using SERVALYT™
PRECOTES™ Hp Kit



Transferrin subtyping using SERVALYT™
PRECOTES™ Tf Kit



PGM subtyping
using SERVALYT™
PRECOTES™ PGM Kit

# Ordering Information SERVALYT™ PRECOTES™/SERVALYT™ PreNets™

Product	pH-range	PAG layer	Size	Quantity	Cat. No.
SERVALYT™ PRECOTES™	3 - 10	150 μm	125 x 125 mm	5 gels	42965.03
	3 - 10	150 μm	245 x 125 mm	5 gels	42967.02
	3 - 10	300 μm	125 x 125 mm	5 gels	42866.02
	3 - 10	300 μm	245 x 125 mm	5 gels	42867.02
	3 - 10	300 <i>µ</i> m	45 x 50 mm	10 gels	42881.01
	3 - 6	150 μm	125 x 125 mm	5 gels	42974.02
	3 - 6	150 $\mu$ m	245 x 125 mm	5 gels	42919.03
	3 - 6	300 μm	125 x 125 mm	5 gels	42874.02
	4 - 6	150 μm	125 x 125 mm	5 gels	42975.02
	4 - 6	150 μm	245 x 125 mm	5 gels	42942.03
	4 - 6	300 <i>µ</i> m	125 x 125 mm	5 gels	42875.02
	5 - 7	150 μm	125 x 125 mm	5 gels	42979.02
	5 - 7	150 μm	245 x 125 mm	5 gels	42946.03
	5 - 7	300 μm	125 x 125 mm	5 gels	42879.02
	6 - 9	150 μm	125 x 125 mm	5 gels	42978.02
	6 - 9	150 μm	245 x 125 mm	5 gels	42954.02
	6 - 9	300 <i>µ</i> m	125 x 125 mm	5 gels	42878.02
SERVALYT™ PreNets™	3 - 10	300 μm	125 x 125 mm	5 gels	42738.02
	4 - 6	300 μm	125 x 125 mm	5 gels	42748.02
	5 - 7	300 μm	125 x 125 mm	5 gels	42760.02

SERVALYT™ PRECOTES™ and SERVALYT™ PreNets™ boxes contain only the gels. Wicks, electrode buffers and applicator strips have to be ordered separately.

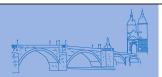
### Ordering Information SERVALYT™ PRECOTES™ Kits

Product	Туре	PAG layer	Size	Quantity	Cat. No.
SERVALYT™ PRECOTES™ Kits	CSF	300 μm	125 x 125 mm	5 gels	42801.01
	CSF	300 μm	245 x 125 mm	5 gels	42800.01
	Нр	300 $\mu$ m	245 x 125 mm	5 gels	42805.01
	Tf	300 μm	245 x 125 mm	5 gels	42803.01
	PGM	300 <i>µ</i> m	125 x 125 mm	5 gels	42895.01
	PGM	300 μm	245 x 125 mm	5 gels	42888.01
	Starter	300 μm	125 x 125 mm	3 gels	39060.01

The IEF Starter Kit additionally contains Bayol F (heat exchange liquid), SERVA Blue W and Violet 17 tablets and IEF marker 3-10 liquid mix.

# Ordering Information Accessories for SERVALYT™ PRECOTES™/PreNets™

Accessories	Size	Quantity	Cat. No.
Applicator Strips	7 x 1 x 260 mm, 24 slots	3	42989.01
	3.5 x 2 x 100 mm, 15 slots	6	42915.01
	2 x 3,5 x 100 mm, 19 slots	3	42914.01
	3.5 x 2 x 240 mm, 43 slots	3	42989.01
Sample Application Pieces	10 x 5 mm	200	42880.01
Anode Fluid 3	-	50 ml	42984.03
Cathode Fluid 10	-	50 ml	42986.03
Bayol F	_	100 ml	14500.01





Carl-Benz-Str. 7 · D-69115 Heidelberg · Germany Phone: +49 (0) 6221 13840-0 · Fax: +49 (0) 6221 13840-10 E-Mail: info@serva.de · Internet: www.serva.de