



# Electrophoresis reagents, buffers, gels & membranes

Only available in EU Countries

## Electrophoresis Reagents and Buffers

### **AGAROSE GEL REAGENTS AND BUFFERS**

Agarose is a highly purified, naturally-occurring polysaccharide. The preparation of agarose gels involves simply heating the powdered agarose in buffer to dissolve it. It will then gel upon cooling. Like acrylamide the pore size of an agarose gel is inversely dependent on the agarose concentration. The pores in agarose gels are generally much larger than those in acrylamide gels, making them suitable for the separation of much larger nucleic acid fragments. There are many types of agarose available. The best choice for routine DNA electrophoresis is Agarose for DNA Electrophoresis (Catalogue Number 11404). This offers good gel strength and low impurities that might interfere with subsequent procedures.

This range of products has been continuously expanded and offers a variety of reagents for electrophoresis, including solid gel media, gel solutions, precast gels, ready-to-use buffers and solutions, as well as stains, dyes and markers.

## Agarose, DNA Electrophoresis Grade

For analytical and preparative nucleic acid electrophoresis. Each batch is tested for the absence of EcoR1 inhibition.

Agarose, Electrophoresis Grade	100g	11404.03
Agarose, Electrophoresis Grade	500g	11404.07
Agarose, Electrophoresis Grade	1000g	11404.05

## Agarose, Premium Molecular Biology Grade

Agarose, Molecular Biology Grade	100g	11381.02
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## TBE Buffer (10x)

TBE buffer is widely used in molecular biology and nucleic acid electrophoresis and has a higher buffering capacity than TAE buffer. It can be used for DNA and RNA, polyacrylamide and agarose gel electrophoresis. Supplied as a 10x concentrate. (0.89M Tris, 0.89M Boric Acid, and 0.02M EDTA in aqueous solution).

TBE Buffer, 10x	1L	42557.01
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## TAE Buffer (10x)

TAE buffer is used for the electrophoresis of nucleic acids. TAE has a lower buffering capacity than TBE, although linear dsDNA tends to run faster in TAE than in TBE buffer. Supplied as a 10x concentrate. (0.4M Tris, 0.2M Acetic Acid, 0.01M EDTA in aqueous solution).

TAE Buffer, 10x	1L	42553.01
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## DNA Marker, Lambda x BstE II

The Lambda x BstE II DNA marker contains 14 fragments, ranging from 117 to 8,454 bp: 117, 224, 702, 1264, 1371, 1929, 2323, 3675, 4324, 4822, 5687, 6369, 7242, and 8454 bp (the 5687 bp and 8453 bp fragments contain the cohesive ends of bacteriophage lambda and may hybridise resulting in a high molecular weight band at 14140 bp, although the ends may be separated by heating to 65°C for 5 minutes and placing on ice). Ideal for the analysis of DNA fragments generated from genomic or plasmid DNA.

DNA Marker, Lambda x BstE II	2 x 50µg	39301.01
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## Ethidium Bromide - Aqueous Solution, 1% w/v

Suitable for use in DNA isolation procedures and in the staining of DNA after electrophoresis. Concentration: 10mg/ml

Ethidium Bromide, Aqueous Solution, 1% w/v.	25ml	21251.01
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## Ethidium Bromide Destaining Bags

Each bag will remove up to 5mg of Ethidium Bromide from solution, from an overnight preparation. The rate of destaining is improved if more destaining bags are added to the solution.



Ethidium Bromide - Destaining Bags	pk/5	90-1500
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# POLYACRYLAMIDE GEL REAGENTS AND BUFFERS

## ACRYLAMIDE-BIS SOLUTIONS

The purity of acrylamide and bis-acrylamide is an important variable in gel electrophoresis. The most significant impurities are acrylic acid and polyacrylamide. The former can affect pH control in the gel while the latter influences the total polyacrylamide content of the gel and therefore its sieving properties. Since both of these can form on standing from highly purified material, especially with exposure to light, it is important to store these products protected from light and cold.

SERVA acrylamide solutions are prepared from powdered material which is subject to stringent quality control of the critical parameters in order to ensure consistent and reliable results.

### Acrylamide-Bis Solution, 29:1, (40% w/v) 3.3% C

Solution of acrylamide and bis N,N'-methylenebisacrylamide in deionised water. Convenient to use, with reduced risk of exposure to neurotoxic acrylamide dust. Applicable to all electrophoresis techniques.

Acrylamide:Bis Solution, 29:1 (40% w/v)	500ml	10680.01
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### Acrylamide-Bis Solution, 37.5:1, (30% w/v) 2.6% C

Solution of acrylamide and bis N,N'-methylenebisacrylamide in deionised water. Convenient to use, with reduced risk of exposure to neurotoxic acrylamide dust. Applicable to all electrophoresis techniques.

Acrylamide:Bis Solution, 37.5:1 (30% w/v)	500ml	10688.01
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## REAGENTS AND BUFFERS

### Ammonium Persulphate (APS), Analytical Grade

A high speed initiator used in polyacrylamide gel electrophoresis.

Ammonium Persulphate (APS)	50g	13375.01
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### N,N,N',N'-Tetramethylethylenediamide (TEMED)

Catalyses the formation of free radicals by ammonium persulphate and accelerates the polymerisation of acrylamide and bis-acrylamide.

TEMED	100ml	35925.01
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### Laemmli Electrophoresis Buffer (10x)

A tris-glycine/SDS electrophoresis buffer supplied as a 10x concentrate for SDS-PAGE. (0.25M Tris, 1.92M Glycine and 1% SDS in aqueous solution).

Laemmli Buffer 10x	2L	42556.01
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### Tris-Glycine/SDS Sample Buffer (2x)

A tris-glycine/SDS sample buffer supplied as a 2x concentrate. (Tris-HCl pH 6.8, 126mM, glycerol 20%, SDS 4%, bromophenol blue 0.02%).

Tris-Glycine/SDS Sample Buffer, 2x	20ml	42527.01
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### Tris-Tricine/SDS Electrophoresis Buffer (10x)

A tris-tricine/SDS electrophoresis buffer supplied as a 10x concentrate for SDS-PAGE. (1M Tris, 1M Tricine and 1% SDS in aqueous solution).

Tris-Tricine/SDS Electrophoresis Buffer, 10x	1L	42552.01
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### Tris-Tricine/SDS Sample Buffer (2x)

A tris-tricine/SDS sample buffer supplied as a 2x concentrate. (Tris-HCl pH 8.45, 90mM, Glycerol 24%, SDS 4%, SERVA Blue G 0.015%, Phenol Red 0.005%).

Tris-Tricine/SDS Sample Buffer, 2x	20ml	42551.01
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### Protein Marker, Unstained SDS-PAGE, 6.5 - 200 KDa, Liquid Mix

Ready to use for SDS-PAGE. Standard proteins ranging from 6.5 to 200 KDa. Protein content is approximately 0.15 to 0.3mg/ml.

Myosin	MW	200,000
B-Galactosidase	MW	116,000
Albumin Bovine (BSA)	MW	67,000
Ovalbumin	MW	45,000
Carbonic Anhydrase	MW	29,000
Trypsin Inhibitor (soybean)	MW	21,000
Lysozyme	MW	14,400
Aprotinin	MW	6,000

Protein Marker, 6.5 to 200KDa	500µl	39215.01
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### Colloidal Coomassie Blue (CCB)

Coomassie Blue G250 is widely used in visualising proteins separated by either agarose or acrylamide gel electrophoresis. This normally involves lengthy staining and destaining of gels using both glacial acetic acid and methanol. These solvents are both toxic and poisonous and need to be disposed as hazardous waste.

In order to avoid using these materials, Coomassie Blue G250 has been formulated into a colloid (CCB), which is both non-toxic and non-hazardous. The colloidal solution represents a safer way to apply the dye to the gels and is both easy and less expensive to use.

The CCB stain is applied to the gel after washing the gel with purified deionised water. The CCB solution is then agitated until the bands start to appear within the gel, any time from 20 minutes to two hours.

Once the bands appear and are of sufficient intensity, simply pour off the CCB stain and wash the gel in water. Keep washing until the background staining is removed and the protein bands appear more intense. This can be further enhanced by using CoZap™, a quick and easy destainer for Coomassie Blue.

Colloidal Coomassie Blue	1 L	30-38-10
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### CoZap™ Coomassie Blue Destainer

CoZap™ is used for the rapid removal of Coomassie Blue stain from electrophoresis gels without the need to change the destaining solution. CoZap™ is a unique pad that has high absorbance for Coomassie Blue and is thus very effective in destaining gels. CoZap™ absorbs any free dye in the solution, making gel destaining 20% faster than conventional methods.

#### BENEFITS INCLUDE

- No need to change the destaining solution
- Fast and simple
- No charcoal or dye residues
- No subsequent destaining required
- One pad can destain up to 10 gels
- 20% faster than conventional methods

CoZap™ - Coomassie Blue Destaining Pads, 76 x 76 x 2mm	pk/25	746800
CoZap™ - Coomassie Blue Destaining Pads, 76 x 76 x 2mm	pk/100	746801
CoZap™ - Coomassie Blue Destaining Pads, 38 x 76 x 2mm	pk/100	746802
CoZap™ - Coomassie Blue Destaining Pads, 38 x 76 x 2mm	pk/250	746803

### Colloidal Coomassie Blue Staining Wash

- 1 Wash**  
Wash Acrylamide or Agarose Gel with purified deionised water. Then dispose of water.
- 2 Stain**  
Add Colloidal Coomassie Blue Safe Stain and agitate Gel until discreet bands appear (20min - 2 hours). Then remove CCB stain.
- 3 Destain**  
Rinse the Gel with purified water and wash several times to remove background staining of Gel. Agitate or swirl to aid destaining of Gel until bands are distinct.
- 4 Observe**  
Pour off water, dry and observe bands.

## Isoelectric Focusing

Isoelectric Focusing (IEF) is an ingenious process for simultaneous concentration and separation of proteins. IEF employs a pH gradient formed by small amphoteric molecules (ampholytes) to resolve proteins according to their different pI (isoelectric point) values. IEF is an end-point method; when the electrophoresis run is completed proteins will appear as separate sharp zones, in the order of their isoelectric point.

Scie-Plas offer the following products for IEF: -

### SERVALYT™ Carrier Ampholytes

SERVALYT™ Carrier Ampholytes are low molecular weight molecules of zwitterionic character. They are a mixture of synthetically derived species of average molecular weight distribution of 400 to 1000 Da and comprise a multitude of varying pI values. In agarose and polyacrylamide gels containing ampholytes, a linear pH gradient is generated when an electric field is applied. The ampholyte molecules carry a net charge and thus migrate in the electric field between the electrodes until they reach the position of their corresponding pI, when they stop moving and form small plateaus (stationary stacks).

### BENEFITS INCLUDE

- High resolution due to multimeric composition
- Fast staining and destaining times
- Clear background associated with very low unspecific binding of dyes and stains
- High solubility in trichloroacetic acid (fast removal of ampholytes during fixation)
- Virtually no interaction with metal ions



### SERVALYT™ Carrier Ampholytes: Overview & Ordering Information

pH range	Cat. No.	Quantity	Cat. No.	Quantity
2-4	42902.01	10 ml	42902.02	25 ml
2-9 Seed Mix	42935.01 42935.03	10 ml 100 ml	42935.02	25 ml
2-11	42900.01	10 ml	42900.02	25 ml
3-4	42922.01	10 ml	42922.02	25 ml
3-5	42903.01	10 ml	42903.02	25 ml
3-6	42944.01	10 ml	42944.01	25 ml
3-7	42945.01	10 ml	42945.01	25 ml
3-10	42940.01	10 ml	42940.02	25 ml
3-10 Iso-Dalt *	42951.01	10 ml	42951.01	25 ml
4-5	42923.01	10 ml	42923.02	25 ml
4-6	42904.01	10 ml	42904.02	25 ml
4-7	42948.01	10 ml	42948.02	25 ml
4-9 T **	42910.01 42910.03	10 ml 100 ml	42910.02	25 ml
5-6	42924.01	10 ml	42924.02	25 ml
5-7	42905.01	10 ml	42905.02	25 ml
5-7 PGM	42936.01	10 ml	42936.02	25 ml
5-8	42949.01	10 ml	42949.02	25 ml
5-9	42950.01	10 ml	42950.02	25 ml
6-7	42925.01	10 ml	42925.02	25 ml
6-8	42906.01	10 ml	42906.02	25 ml
6-9	42913.01	10 ml	42913.02	25 ml
7-9	42907.01	10 ml	42907.02	25 ml
9-11	42909.01	10 ml	42909.02	25 ml

\* Iso-Dalt quality; special 2-D grade to be used in 2-D electrophoresis

\*\* Technical grade quality for preparative work

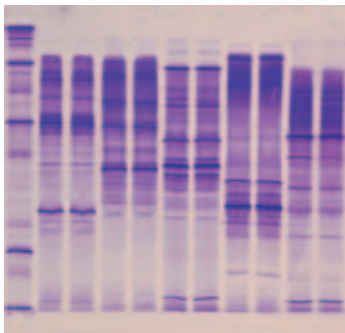
## Precast Gels for Isoelectric Focusing

With SERVALYT™ PRECOTES™ precast gels, the days of elaborate, inconvenient casting of gels are gone. Scie-plas offers ready-to-use polyacrylamide gels for horizontal IEF that are simple to handle and reliable in performance.

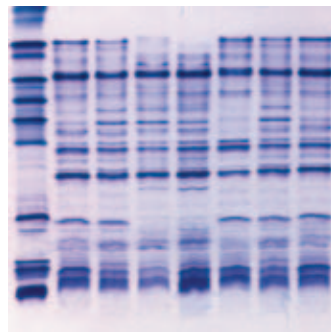
The polyacrylamide layer is bonded to a sturdy, inert polyester support film and protected from damage and drying out by a thin cover sheet. The polymer concentration is 5% and cross-linking is 3%.

### BENEFITS INCLUDE

- **Reliable, reproducible results**
- **Easy to use**
- **Thin (0.3mm) and Ultra-thin (0.15mm) gels**
- **3 Gel formats, Large - 245 x 125mm, Standard - 125 x 125mm, Mini - 45 x 50mm (width x height)**
- **Mini gels, compatible with automated electrophoresis units**
- **Long shelf life: over 12 months**



Meat



Potato

### Blank SERVALYT™ PRECOTES™ Precast IEF Gels

Blank PRECOTES™ were developed to provide a versatile solution to perform isoelectric focusing of any pH range. The Blank PRECOTES™ are equilibrated in the ampholyte mixture of choice for 30 minutes prior to electrophoresis.

Blank PRECOTES™, Gel size 125 x 125 x 0.3mm, 5 gels	42759.01
Blank PRECOTES™, Gel size 245 x 125 x 0.3mm, 5 gels	42710.01

### SERVALYT™ PRECOTES™ - Precast IEF Gels

SERVALYT™ PRECOTES™ pH 3 - 10 0.15mm thick, Size 125 x 125mm	5 gels	42965.03
SERVALYT™ PRECOTES™ pH 3 - 6 0.15mm thick, Size 125 x 125mm	5 gels	42974.02
SERVALYT™ PRECOTES™ pH 4 - 6 0.15mm thick, Size 125 x 125mm	5 gels	42975.02
SERVALYT™ PRECOTES™ pH 5 - 7 0.15mm thick, Size 125 x 125mm	5 gels	42979.02
SERVALYT™ PRECOTES™ pH 6 - 9 0.15mm thick, Size 125 x 125mm	5 gels	42978.02
SERVALYT™ PRECOTES™ pH 3 - 10 0.3mm thick, Size 125 x 125mm	5 gels	42866.02
SERVALYT™ PRECOTES™ pH 3 - 6 0.3mm thick, Size 125 x 125mm	5 gels	42874.02
SERVALYT™ PRECOTES™ pH 4 - 6 0.3mm thick, Size 125 x 125mm	5 gels	42875.02
SERVALYT™ PRECOTES™ pH 5 - 7 0.3mm thick, Size 125 x 125mm	5 gels	42879.02
SERVALYT™ PRECOTES™ pH 6 - 9 0.3mm thick, Size 125 x 125mm,	5 gels	42878.02
SERVALYT™ PRECOTES™ pH 3 - 10 0.15mm thick, Size 245 x 125mm	5 gels	42967.02
SERVALYT™ PRECOTES™ pH 3 - 6 0.15mm thick, Size 245 x 125mm	5 gels	42919.03
SERVALYT™ PRECOTES™ pH 4 - 6 0.15mm thick, Size 245 x 125mm	5 gels	42942.03
SERVALYT™ PRECOTES™ pH 6 - 9 0.15mm thick, Size 245 x 125mm	5 gels	42954.02
SERVALYT™ PRECOTES™ pH 3 - 10 0.3mm thick, Size 245 x 125mm	5 gels	42867.02



### SERVALYT™ PRECOTES™ STARTER KIT

The SERVALYT™ PRECOTES™ STARTER KIT contains 3 x SERVALYT™ PRECOTES™ pH 3 - 10 precast gels, electrode wicks, applicator strips, anode and cathode solutions, Bayol F, SERVA Blue W tablets, lyophilised IEF marker 3 - 10 and instructions for IEF and staining.

SERVALYT™ PRECOTES™ Starter Kit	EACH	39060.01
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## PROTEIN MARKER FOR ISOELECTRIC FOCUSING

The Liquid Mix IEF Marker pH 3 - 10 is a ready-to-use protein marker especially developed for IEF applications. The marker is applicable to all horizontal and vertical IEF gels and can be used in both native and denaturing conditions (e.g. containing 8M). The marker is an ideal tool for the determination of the pI (isoelectric point) of unknown protein samples, but also for monitoring separation performance of IEF gels. The marker is supplied in 10% glycerol containing Bromophenol Blue (0.01%) and Methyl Red (0.01%).

### BENEFITS INCLUDE

- Ready-to-use or lyophilised protein marker for isoelectric focusing
- For pI determination of unknown protein samples
- For monitoring the separation performance of IEF gels
- One standard applicable to all IEF gels (vertical/horizontal)
- No need for extra "High pI range" or "Low pI range" markers
- Purified protein components, salt-free
- 13 isoforms, featuring a characteristic pattern

Liquid IEF Marker pH 3 - 10 Ready-to-use	5mg	39212.01
Lyophilised IEF Marker pH 3 - 10	10mg	39211.01

## ACCESSORIES FOR ISOELECTRIC FOCUSING

### Applicator Strips

Four different applicator strips are available for dispensing samples.

Applicator Strips 2 x 3.5 19 slots, 100mm long	6 strips	42914.01
Applicator Strips 3.5 x 2 15 slots, 100mm long	6 strip	42915.01
Applicator Strips 7 x 1 24 slots, 260mm long	3 strips	42989.01
Applicator Strips 3.5 x 2 43 slots, 240mm long	3 strips	42899.01
Applicator Strip Kit One of each: 42914, 42915, 42989, 42899	4 strips	42937.01
Sample Application Pieces 10 x 5mm	200 pieces	42880.01

### Electrode Wicks

Available in three sizes: Standard - 120 x 6 x 1mm, Long - 240 x 6 x 1mm and Extra - 300 x 6 x 1mm.

Electrode Wicks, Standard Size 120 x 6 x 1mm	100 pieces	42988.01
Electrode Wicks, Long Size 240 x 6 x 1mm	100 pieces	42987.03
Electrode Wicks, Extra Size 300 x 6 x 1mm	100 pieces	42972.03

### Anode Fluid

0.17g L-aspartic acid / 0.18g L-glutamic acid in water.

Anode Fluid 3,	50ml	42984.03
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### Cathode Fluid

0.22g L-arginine, 0.18g L-lysine, 6.0ml ethylenediamine in water.

Cathode Fluid 10	50ml	42986.03
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## Other Reagents

### Bayol F

Bayol F	100ml	14500.01
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### Kerosene Pure

Kerosene	1 L	26940.01
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## IPG BlueStrips - Dried gel strips with immobilised pH gradient

IPG BlueStrips are dried gel strips, incorporating an immobilised pH gradient, used in high resolution 2-D gel electrophoresis of proteins.

### BENEFITS INCLUDE

- Stored at -20°C the gel strips are stable for at least 18 months
- Each package contains 12 gel strips, 3.0mm wide
- Consistent performance - 12 strips per package, all derived from the same production lot
- Reliability - accurate casting procedures ensures lot-to-lot reproducibility of pH gradients
- GMP/GLP conformity - each strip has its individual lot number

### IPG Strips

IPG BlueStrip pH 3 - 10	7cm	12 strips	43001.01
IPG BlueStrip pH 3 - 10	18cm	12 strips	43011.01
IPG BlueStrip pH 3 - 10	24cm	12 strips	43021.01
IPG BlueStrip pH 3 - 10 NL*	7cm	12 strips	43002.01
IPG BlueStrip pH 3 - 10 NL*	18cm	12 strips	43012.01
IPG BlueStrip pH 3 - 10 NL*	24cm	12 strips	43022.01
IPG BlueStrip pH 4 - 7	7cm	12 strips	43003.01
IPG BlueStrip pH 4 - 7	18cm	12 strips	43013.01
IPG BlueStrip pH 4 - 7	24cm	12 strips	43023.01
IPG BlueStrip pH 6 - 10	7cm	12 strips	43004.01
IPG BlueStrip pH 6 - 10	18cm	12 strips	43014.01
IPG BlueStrip pH 6 - 10	24cm	12 strips	43024.01

\* NL Non-Linear Gradient

### Rehydration tray for IPG Strips

To rehydrate up to 12 IPG strips in lengths up to 24cm. The rehydration tray maintains its shape and is resistant against chemicals normally used to rehydrate IPG strips.

Rehydration Tray	Each	43091.01
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## Precast PAGE Gels

### VERTICAL PRECAST GELS FOR MINI VERTICAL ELECTROPHORESIS.

A novel range of precast gels, ready-to-use and cast from acrylamide-bis in unbreakable safety cassettes. The SERVAGel™ gives premium resolution and superb band sharpness. The 10 x 10cm format is compatible with many vertical electrophoresis units, particularly the TV50 and TV100 units. SERVAGel™ are packed single and vacuum sealed.

#### BENEFITS INCLUDE

- **Easy and safe to operate, no leakage**
- **Short set-up times, gels are ready to use**
- **Unbreakable, recyclable plastic cassette**
- **Minimum health risk (polymerised acrylamide, non-toxic)**
- **For gradient gels, please inquire**

#### SERVAGel™ TG 8 - Vertical Tris-Glycine Gel 8%

Storage Temperature +20°C to +80°C.

The SERVAGel™ TG 8 can be operated in the presence or absence of SDS (SDS-PAGE, native PAGE). The separation range is from 60 to 200KDa. Shelf life is 3 months.

SERVAGel™ TG 8 - Tris-Glycine Gel 8%	2 gels	43208.03
SERVAGel™ TG 8 - Tris-Glycine Gel 8%	6 gels	43208.02
SERVAGel™ TG 8 - Tris-Glycine Gel 8%	10 gels	43208.01

#### SERVAGel™ TG 10 - Vertical Tris-Glycine Gel 10%

Storage Temperature +20°C to +80°C.

The SERVAGel™ TG 10 can be operated in the presence or absence of SDS (SDS-PAGE, native PAGE). The separation range is from 25 to 200KDa.

Shelf life is 3 months.

SERVAGel™ TG 10 - Tris-Glycine Gel 10%	2 gels	43210.03
SERVAGel™ TG 10 - Tris-Glycine Gel 10%	6 gels	43210.02
SERVAGel™ TG 10 - Tris-Glycine Gel 10%	10 gels	43210.01

#### SERVAGel™ TG 12 - Vertical Tris-Glycine Gel 12%

Storage Temperature +20°C to +80°C.

The SERVAGel™ TG 12 can be operated in the presence or absence of SDS (SDS-PAGE, native PAGE). The separation range is from 15 to 100KDa.

Shelf life is 3 months.

SERVAGel™ TG 12 - Tris-Glycine Gel 12%	2 gels	43212.03
SERVAGel™ TG 12 - Tris-Glycine Gel 12%	6 gels	43212.02
SERVAGel™ TG 12 - Tris-Glycine Gel 12%	10 gels	43212.01

#### SERVAGel™ TG 14 - Vertical Tris-Glycine Gel 14%

Storage Temperature +20°C to +80°C.

The SERVAGel™ TG 14 can be operated in the presence or absence of SDS (SDS-PAGE, native PAGE). The separation range is from 10 to 90KDa.

Shelf life is 3 months.

SERVAGel™ TG 14 - Tris-Glycine Gel 14%	2 gels	43214.03
SERVAGel™ TG 14 - Tris-Glycine Gel 14%	6 gels	43214.02
SERVAGel™ TG 14 - Tris-Glycine Gel 14%	10 gels	43214.01

#### SERVAGel™ TG 16 - Vertical Tris-Glycine Gel 16%

Storage Temperature +20°C to +80°C.

The SERVAGel™ TG 16 can be operated in the presence or absence of SDS (SDS-PAGE, native PAGE). The separation range is from 7 to 80KDa.

Shelf life is 3 months.

SERVAGel™ TG 16 - Tris-Glycine Gel 16%	2 gels	43216.03
SERVAGel™ TG 16 - Tris-Glycine Gel 16%	6 gels	43216.02
SERVAGel™ TG 16 - Tris-Glycine Gel 16%	10 gels	43216.01

#### SERVAGel™ Neutral pH 7.4

Storage Temperature +20°C to +80°C.

The SERVAGel™ Neutral pH 7.4 can be operated with various buffer systems, such as Tris-Glycine, MOPS-Tris and Tris-Tricine. The separation range is from 6.5 to 200KDa.

Shelf life is 3 months.

SERVAGel™ Neutral pH 7.4	2 gels	43220.03
SERVAGel™ Neutral pH 7.4	6 gels	43220.02
SERVAGel™ Neutral pH 7.4	10 gels	43220.01

## Blotting Buffers & Membranes

### GEL BLOTTING PAPER - FN100

Gel blotting paper with an extremely smooth surface and a 0.35mm thickness. Made from the purest naturally occurring raw materials, offering the maximum degree of absorption and  $\alpha$  cellulose content.

Fast running and high absorption capacity; ideal combination of chromatography and gel blotting paper. The ideal general purpose blotting paper for Southern, Northern and Western blotting, gel lifting, sequencing, buffer wicking and semi-dry blotting.

### BENEFITS INCLUDE

- Superior uniformity across the entire contact area in the blotting transfer system
- Absorption and improvement in the transport of transfer buffer after capillary and semi-dry blotting
- Double-sided cover of gel and transfer membrane in the blotting tank after conventional electroblotting
- To prevent direct contact between the blotting membrane and porous cover plate of the vacuum chamber for dot/slot blotting of RNA and DNA

200 x 200mm	100 Sheets	FN100
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### Towbin Buffer, 10x, for Western Blotting

Supplied as a 10x concentrate: (0.25M Tris and 1.92M Glycine in aqueous solution.

Working buffer: dilute 100ml of 10x concentrate with 200ml of methanol and 700ml distilled water.

Towbin Buffer, 10x	1 L	42558.02
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### Semi-Dry Blotting Buffer Kit

Supplied as a ready-to-use kit, comprising of 3 components for Western blotting in the semi-dry blotting units.

Buffer 1. [Conc. Anode buffer]: 0.3M Tris and 20% Methanol in aqueous solution.

Buffer 2. [Diluted Anode buffer]: 0.03M Tris and 20% Methanol in aqueous solution.

Buffer 3. [Cathode buffer]: 0.25M Tris/HCl (pH 9.4), 0.04M 6-Aminocaproic acid and 20% Methanol in aqueous solution.

Semi-Dry Blotting Buffer Kit	2 x 500ml	42559.01
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### BLOTTING MEMBRANES

Scie-Plas offers 5 different types of blotting membrane for use with all transfer techniques. Each membrane is available in 10 x 10cm and 20 x 20cm formats and in 0.2 and 0.45 $\mu$ m pore sizes for the binding of low (<20kDa) and high (>20kDa) molecular weight proteins and nucleic acids.

#### Nitrocellulose Blotting Membranes

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

0.02 $\mu$ m pore size, 100mm x 100mm	25 Sheets	EB-MEM-NC20
0.02 $\mu$ m pore size, 200mm x 200mm	25 Sheets	EB-MEM-NC20L
0.45 $\mu$ m pore size, 100mm x 100mm	25 Sheets	EB-MEM-NC45
0.45 $\mu$ m pore size, 200mm x 200mm	25 Sheets	EB-MEM-NC45L



#### Supported Nitrocellulose Blotting Membranes

As per nitrocellulose but more robust for frequent handling.

0.02 $\mu$ m pore size, 100mm x 100mm	25 Sheets	EB-MEM-SNC20
0.02 $\mu$ m pore size, 200mm x 200mm	25 Sheets	EB-MEM-SNC20L
0.45 $\mu$ m pore size, 100mm x 100mm	25 Sheets	EB-MEM-SNC45
0.45 $\mu$ m pore size, 200mm x 200mm	25 Sheets	EB-MEM-SNC45L

#### Polyvinylidene Fluoride (PVDF) Blotting Membranes

A hydrophobic membrane with much higher protein-binding capacity than nitrocellulose.

0.02 $\mu$ m pore size, 100mm x 100mm	25 Sheets	EB-MEM-PDVF20
0.02 $\mu$ m pore size, 200mm x 200mm	25 Sheets	EB-MEM-PDVF20L
0.45 $\mu$ m pore size, 100mm x 100mm	25 Sheets	EB-MEM-PDVF45
0.45 $\mu$ m pore size, 200mm x 200mm	25 Sheets	EB-MEM-PDVF45L

#### Supported Nylon-66 Blotting Membranes

A more versatile membrane, with reduced background to increase sensitivity, for the binding of nucleic acids after semi-dry blotting, capillary Southern and Northern transfer; more robust for frequent handling.

0.02 $\mu$ m pore size, 100mm x 100mm	25 Sheets	EB-MEM-SN20
0.02 $\mu$ m pore size, 200mm x 200mm	25 Sheets	EB-MEM-SN20L
0.45 $\mu$ m pore size, 100mm x 100mm	25 Sheets	EB-MEM-SN45
0.45 $\mu$ m pore size, 200mm x 200mm	25 Sheets	EB-MEM-SN45L

#### Positively Charged Supported Nylon-66 Blotting Membranes

Higher binding affinity than supported Nylon-66 for negatively charged molecules such as nucleic acids during Southern and Northern transfer; more robust for frequent handling.

0.02 $\mu$ m pore size, 100mm x 100mm	25 Sheets	EB-MEM-SN20
0.02 $\mu$ m pore size, 200mm x 200mm	25 Sheets	EB-MEM-SN20L
0.45 $\mu$ m pore size, 100mm x 100mm	25 Sheets	EB-MEM-SN45
0.45 $\mu$ m pore size, 200mm x 200mm	25 Sheets	EB-MEM-SN45L