**Agarose, DNA Electrophoresis Grade**
For analytical and preparative nucleic acid electrophoresis. Each batch is tested for the absence of EcoR1 inhibition.

<table>
<thead>
<tr>
<th>Description</th>
<th>Weight</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agarose, Electrophoresis Grade</td>
<td>100g</td>
<td>11404.03</td>
</tr>
<tr>
<td>Agarose, Electrophoresis Grade</td>
<td>500g</td>
<td>11404.07</td>
</tr>
<tr>
<td>Agarose, Electrophoresis Grade</td>
<td>1000g</td>
<td>11404.05</td>
</tr>
</tbody>
</table>

**Agarose, Premium Molecular Biology Grade**

<table>
<thead>
<tr>
<th>Description</th>
<th>Weight</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agarose, Molecular Biology Grade</td>
<td>100g</td>
<td>11381.02</td>
</tr>
</tbody>
</table>

**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).

<table>
<thead>
<tr>
<th>Description</th>
<th>Volume</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>TBE Buffer, 10x</td>
<td>1L</td>
<td>42557.01</td>
</tr>
</tbody>
</table>

**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).

<table>
<thead>
<tr>
<th>Description</th>
<th>Volume</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>TAE Buffer, 10x</td>
<td>1L</td>
<td>42553.01</td>
</tr>
</tbody>
</table>

**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.

<table>
<thead>
<tr>
<th>Description</th>
<th>Volume</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>DNA Marker, Lambda x BstE II</td>
<td>2 x 50µg</td>
<td>39301.01</td>
</tr>
</tbody>
</table>

**Ethidium Bromide - Aqueous Solution, 1% w/v**
Suitable for use in DNA isolation procedures and in the staining of DNA after electrophoresis.

<table>
<thead>
<tr>
<th>Description</th>
<th>Volume</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethidium Bromide, Aqueous Solution, 1% w/v</td>
<td>25ml</td>
<td>21251.01</td>
</tr>
</tbody>
</table>

**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.

<table>
<thead>
<tr>
<th>Description</th>
<th>Quantity</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethidium Bromide - Destaining Bags</td>
<td>pk/5</td>
<td>90-1500</td>
</tr>
</tbody>
</table>

**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 acrylonitrile 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.

**Duracryl**
Duracryl is a patented high-tensile strength acrylamide which is mechanically very strong and elastic. It also guarantees high quality band resolution and reproducibility.


<table>
<thead>
<tr>
<th>Description</th>
<th>Volume</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Duracryl 30% / Bis 0.65% (29:1)</td>
<td>1L</td>
<td>PRS-800085</td>
</tr>
<tr>
<td>Duracryl 30% / Bis 0.8% (29:1)</td>
<td>1L</td>
<td>PRS-800148</td>
</tr>
</tbody>
</table>

**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

**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
REAGENTS AND BUFFERS

Ammonium Persulphate (APS), Analytical Grade
A high speed initiator used in polyacrylamide gel electrophoresis.

Ammonium Persulphate (APS) 50g 13375.01

N,N,N',N'-Tetramethylethlenediamide (TEMED)
Catalyses the formation of free radicals by ammonium persulphate and accelerates the polymerisation of acrylamide and bis-acrylamide.

TEMED 100ml 35925.01

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

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

Tris-Glycine/SDS Sample Buffer, 2x 20ml 42527.01

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

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

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

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 observed bands appear. Then remove CCB stain.

3. Destain
Rinse the gel with purified water and wash several times to remove background staining of gel. Apatise or swirl to aid destaining of gel until bands are distinct.

4. Observe
Pour off water, dry and observe bands.

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

Colloidal Coomassie Blue Staining Wash

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

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.