



SERVA Electrophoresis Products

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.

Scie-Plas is pleased to announce a new partnership with SERVA Electrophoresis GmbH, based in Heidelberg, Germany. SERVA started the development and manufacturing of products for protein electrophoresis in the early Seventies, by introducing SERVALYT™ carrier ampholytes and SERVALYT™ PRECOTES™ precast gels for isoelectric focusing.

This range of products has been continuously expanded and today SERVA 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.

SERVA electrophoresis products are subject to stringent quality control to ensure "Electrophoresis Grade" performance - supported by constant application testing conducted in their laboratories in Heidelberg.

Agarose, DNA Electrophoresis Grade

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

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

Agarose, Premium Molecular Biology Grade

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| 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).

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| 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).

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| 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.

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| 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

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| 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.



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| 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.

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. Ref: Patton, W.F., Lopez, M.F., Barry, P., and Skea, W.M. A mechanically strong matrix for protein electrophoresis with enhanced silver staining properties. *Biotechniques*, 12: 580-585, (1991)

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| Duracryl 30% / Bis 0.65% (29:1) | 1 L | PRS-800085 |
| Duracryl 30% / Bis 0.8% (29:1) | 1 L | PRS-800148 |

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.

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| 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.

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| Acrylamide:Bis Solution, 37.5:1 (30% w/v) 500ml | 10688.01 |
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