APPLICATION NOTE

Pre-Cast vs Hand-Cast Gels for SDS-PAGE

HAND-CAST GELS CAN DELAY WORKFLOWS

Hand-cast gels are time-consuming to prepare and, when poured badly, result in irregular bands or streaking of proteins. This makes quantitation difficult and can delay workflows while experiments are repeated. Further disadvantages of hand-casting include the high potential for introducing user-bias and the susceptibility of hand-casting apparatus to leakage. There are also numerous safety implications associated with handling unpolymerized acrylamide, a known neurotoxin and probable human carcinogen.

PRE-CAST GELS OFFER BETTER DATA QUALITY

For the generation of consistent and reproducible data, and to benefit from significant time savings, many researchers instead choose to use pre-cast gels. Available in a wide variety of percentages and gel formulations and including gradient gels for the resolution of a broader range of proteins, pre-cast gels afford greater uniformity and ease of use than hand-cast alternatives.

By eliminating the need to handle the acrylamide monomer, pre-cast gels also represent a far safer approach to protein separation. Furthermore, the high chemical stability of pre-cast gels provides a considerably longer shelf-life, permitting batch reservation.

RUNBLUE™ BIS-TRIS PROTEIN GELS FOR IMPROVED PROTEIN SEPARATION

RunBlue™ Bis-Tris Protein Gels are pre-cast from a resilient gel matrix to allow for a comb-free system with protruding teeth, minimizing the risk of cross-well contamination. Not only do thinner fingers allow for higher capacity wells and easier loading, but the superior gel strength delivers improved handling and faster protein transfer.

Produced using a unique homogeneous polymerization process which generates no residual free acrylamide, RunBlue™ Bis-Tris Protein Gels provide improved safety. Compatibility with widely-used apparatus such as the NuPAGE® XCell SureLock™ Mini-Cell system allows easy incorporation into existing protocols, while the neutral running pH ensures sharp bands and high protein integrity.

A SUPERIOR ALTERNATIVE TO NUPAGE GELS

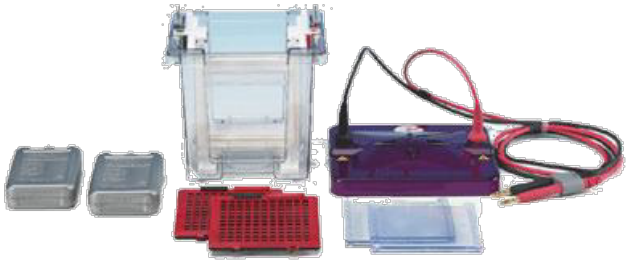
Available in the same gel percentages as the NuPAGE Bis-Tris gel range, and providing a comparable migration profile, RunBlue™ Bis-Tris Protein Gels offer many advantages:

- Proprietary production method affords better resolution and sharper bands
- Stronger gels for easier handling
- Comb-free and strip-free
- Outlined wells for quicker sample loading
- Unique plastic cassette minimizes streaking and improves band sharpness
- Greater batch-to-batch reproducibility
- Longer shelf-life
- Competitively priced

RunBlue™ Bis-Tris gels can help to take your research to the next level - contact us to find out more.

YOU MIGHT ALSO BE INTERESTED IN…

Our RunBlue™ gels run best on our Dual Run and Blot unit. This unique apparatus permits the running of both 10x10cm and 8x10cm gels.



The unit is available in dual and quad form, enabling up to 4 gels to be run at one time. Both units can also be used to complete Western blots. The unique electrode arrangement provides a gradient electric field which ensures that both small and large proteins migrate from the gel at a comparable rate.

The Quad units are available in cooled format, enabling cold water hook up if required.