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ProSieve[™] EX Running Buffer

Instructions for use

Introduction

ProSieve[™] EX Running Buffer, a novel formulation of the classic Laemmli buffer, is a proprietary solution to drastically increase the separation speed without excessive heat generation affecting the gel.

The ProSieve[™] EX Running Buffer is a direct replacement for tris-glycine SDS running buffer. Compatible with gels such as PAGEr[™] Gold and other commercial precast or hand cast gels intended to be used in a tris-glycine or Laemmli system.

Contents

Supplied as a 10X concentrate

Store at room temperature for up to 1 year from the date of manufacture

Protocol

Prepare a 1X running buffer solution by diluting the stock buffer (10X solution) with distilled water.

Note: When using with PAGEr[™] EX Gels use 0.67X final concentration diluting the 10X stock 15-fold with deionized water. (i.e. 67 ml 10X stock brought to1000 ml with deionized water) and run according to PAGEr[™] EX Gel protocol.

Run gel under your normal conditions, between 50 and 250 ${\rm V}$

Buffer concentration can be adjusted for faster results:

| Method | Buffer | Running | Average running |
|----------|--------|-----------|------------------|
| | conc. | voltage | time for minigel |
| Standard | 1 X | 200-250 V | 18 – 35 min* |

*Faster run times can be achieved under certain conditions. Contact <u>scientific.support@lonza.com</u> for more information.

Notes

- For best results use enough buffer in the chamber such that the outer chamber fills to just below the wells to help with cooling. Be sure to monitor your run as the expected run time will be much shorter than that of standard TGS buffer.
- Buffer contains SDS and is designed for denaturing gel electrophoresis. This buffer is not suitable for running in a native environment.
- Follow with the ProSieve™ EX Transfer Buffer for continued time savings into Western blot.
- For any particular gel concentration, the ProSieve™ EX Running Buffer's optimal size range may shift slightly to favor smaller sizes compared to gels run using standard tris-glycine buffer.

| Gel* | Size range for | Size range for | |
|---------------|-----------------------|--------------------------|--|
| concentration | standard tris-glycine | ProSieve [™] EX | |
| 7.50% | 50-325 kDa | 20-250 kDa | |
| 10% | 30-180 kDa | 15-140 kDa | |
| 12% | 20-140 kDa | 10-80 kDa | |
| 15% | 12-100 kDa | 5-70 kDa | |
| 4-12% | 35-350 kDa | 18-300 kDa | |
| 4-20% | 13-300 kDa | 10-225 kDa | |
| 8-16% | 18-200 kDa | 12-150 kDa | |
| 10-20% | 10-120 kDa | 5-100 kDa | |

*Optimal size ranges based on PAGEr™ Gold tris-glycine precast gels, other commercial precast or home-brew gels may have slightly different ranges.

Product Safety

For details regarding product safety, see material safety data sheet (MSDS); call +1 (800) 638-8174 for extra copies of the MSDS. Emergency after hours, call collect +1 (303) 595-9048.

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Ordering Information:

| Catalog # | Description | Size |
|-----------|-----------------------------|------|
| 00200307 | ProSieve™ EX Running Buffer | 1L |
| 00200308 | ProSieve™ EX Running Buffer | 4L |

Related Products:

PAGEr[™] Gold Tris-glycine Precast Gels PAGEr[™] Minigel Chamber and Blot Module Kit ProSieve[™] EX Transfer Buffer ProSieve[™] ProTrack[™] Dual Color Protein Loading Buffer ProSieve[™] Blue Protein Staining Solution ProSieve[™] Protein Markers (stained and unstained) AccuGENE[™] Molecular Biology Grade Water

> For research use only. Not for use in diagnostic procedures.

Buffer technology licensed from DGel Electrosystem, patents pending

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