



The Gelfree 8100 Fractionation System partitions complex protein mixtures into liquid-phase molecular weight fractions.

FEATURES

- Intact protein molecular weight fractionation
- Liquid-phase recovery without band or spot cutting
- Broad mass range fractionation from 3.5 kDa to 150 kDa
- Eight samples in 90 minutes
- Programmable molecular weight fraction targeting
- High protein recovery
- High reproducibility
- Sampling unbiased by hydrophobicity, pI
- High loading capacity

APPLICATIONS

- Combine with orthogonal fractionation methods
- Prepare fractions for analysis by LC-MS, MALDI-TOF, immunoblot
- Fractionate intact proteins for top-down analysis
- Analyze variants, post-translational modifications, alterations
- Use high loading capacity to prepare low-abundance proteins for analysis
- Perform in-solution digests rather than lengthy in-gel digests

COMPONENTS

The Gelfree 8100 Fractionation System consists of the Gelfree 8100 Fractionation Station and Gelfree 8100 Cartridges.



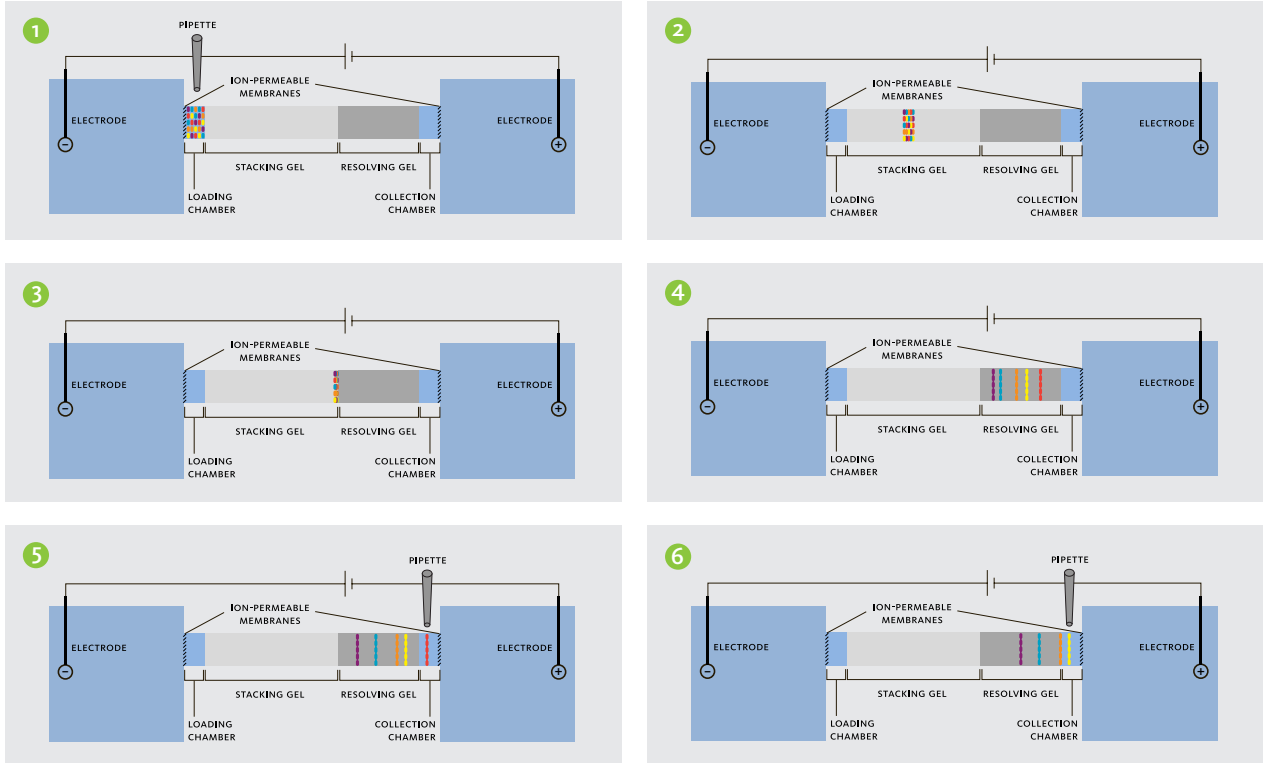
Gelfree 8100 Fractionation Station



Gelfree 8100 Cartridge

HOW IT WORKS

Gelfree 8100 Cartridges complement the Gelfree 8100 Fractionation Station, which delivers specified current or voltage to each of the eight channels and pauses for fraction collection according to user programming.



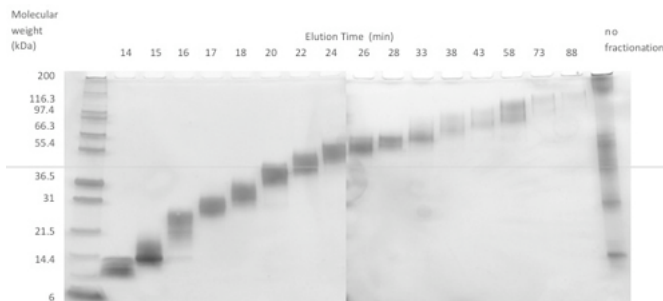
Gelfree technology is gel eluted liquid fraction entrapment electrophoresis. Each of the eight Gelfree 8100 Cartridge channels consists of a gel column surrounded by pipette-accessible sample loading and fraction collection chambers. Proteins eluted from the column are entrapped in a defined volume of solution in the collection chamber. A 3.5 kDa molecular weight cut-off trapping membrane repels negatively charged proteins to limit protein-membrane binding interactions and optimize yield.

PERFORMANCE

Molecular weight fractionation over a broad mass range combined with high yield, liquid-phase recovery make the Gelfree 8100 Fractionation System essential equipment for proteomics research.

BROAD MASS RANGE FRACTIONATION

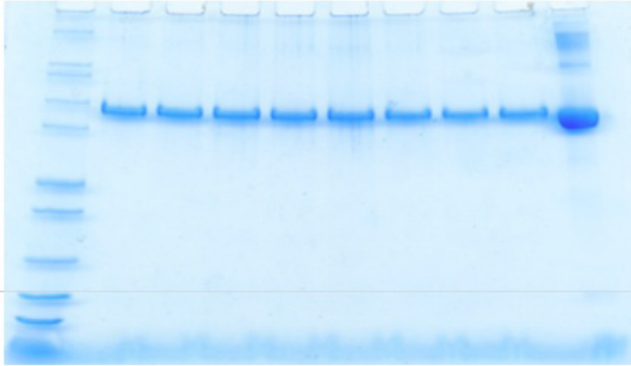
The Gelfree 8100 Fractionation System offers molecular weight-based fraction targeting over a broad mass range.



Intact protein molecular weight-based fractionation with liquid phase recovery: Each of 16 fractions collected from a single channel of the Gelfree 8100 Fractionation System was run on a 1D tris-glycine gels and silver stained. The gel shows the molecular weight based fractions from bovine liver homogenate.

RECOVERY AND REPRODUCIBILITY

The Gelfree 8100 Fractionation System uses short run times and specialized materials to optimize protein recovery from targeted molecular weight fractions.



Recovery from Gelfree is >60% and reproducibility of recovery is excellent (CV<10%).

COLUMN	% ADJ. VOL.	% RECOVERY
1.0	10.3	62.6
2.0	10.4	63.5
3.0	10.8	66.0
4.0	11.8	71.9
5.0	11.1	67.8
6.0	9.0	54.7
7.0	9.6	58.6
8.0	10.5	64.0
Control	16.4	

AVERAGE	STANDARD DEVIATION	% CV
63.6	5.3	8.4

Protein recoveries and reproducibility of recovery as calculated from gel image analysis data produced using QuantityOne software (Bio-Rad).

INSTALLATION SPECIFICATIONS

DIMENSIONS	33 cm W x 14 cm H x 33 cm D (13" W x 5-1/2" H x 13" D)
CLEARANCE	38 cm (15") vertical clearance for Gelfree Cartridge loading
WEIGHT	4.5 kg (10 lb)
POWER SOURCE	90-240 VAC, 50-60 Hz
POWER	240 VA



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