



www.expedeon.com  
info@expedeon.com

# GELFREE® 8100

## 10% Cartridge Kit

Quick Reference Card

Part Number: 42105

Brief instructions are provided for use of the GELFREE® 8100 10% Cartridge Kit with the GELFREE® 8100 Fractionation System. This kit is designed for fractionation of proteins in the mass range 3.5 - 100 kDa, with optimized resolution at 15 - 100 kDa. For detailed operating instructions, refer to the GELFREE® 8100 User Manual available at [www.expedeon.com](http://www.expedeon.com) or contact Technical Support.

### Before You Start

**! IMPORTANT** The presence of low molecular weight contaminants, such as detergents, urea, and excessive salts, will negatively impact results. Before you start, be sure to fully desalt and remove any known contaminants. For effective removal of salts, we recommend the Expedeon Amintra™ Desalting Spin Columns (ADS0050 or ADS0100).

### Prepare Samples

Reagent	Volume
Desalted Sample	Up to 112 µL
Acetate Sample Buffer (5X)	30 µL
1M DTT Reducing Agent	8 µL
Deionized Water	x µL
<b>TOTAL VOLUME</b>	<b>150 µL</b>

Heat at 50°C for 10 min. (**Note: Excessive heating will cause degradation**)

### Prepare Cartridge

Replace Storage Buffer in the desired channels with HEPES Running Buffer (RB). Place 6 mL RB in the Cathode Reservoir, 8 mL in the Anode Reservoir, and 150 µL in the Collection Chamber.

### Load Samples

Remove any residual Running or Storage Buffer from the Sample Loading Chamber with a pipette. Add the entire 150 µL of prepared sample into the chamber.

### Run Conditions

Voltaje:	50-100 V
Run Time:	~2.5 hours
Expected Current:	3-11 mA per channel

---

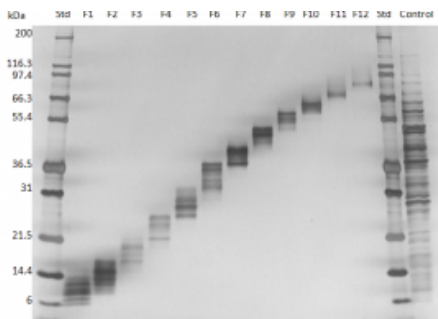
## Recommended Method

Step	1	2	3	4	5	6	7	8	9	10	11	12	13
Voltage (V)	50	50	50	50	50	100	100	100	100	100	100	100	100
Fraction Interval (min)	16	36	2	3	4	3	4	5	7	10	15	20	35
Total Elapsed Time (min)	16	52	54	57	61	64	68	73	80	90	105	125	160
Action/ Fraction #	Add RB*	1	2	Change RB/3	4	5	6	7	8	Change RB/9	10	Change RB/11	12

\* At the first pause (completion of Step 1) add 2 mL of HEPES Running Buffer (RB) to the Cathode Reservoir, for a total of 8 mL. Wash the sample loading chamber thoroughly with Running Buffer.

---

## Expected Outcome



Fractionation of *S. cerevisiae* using the GELFREE® 8100 10% Cartridge Kit. A 500 µg aliquot of yeast lysate was fractionated into 12 fractions ranging in molecular weight from 3.5 to 100 kDa. The fractions were visualized using 1D gel electrophoresis, followed by silver staining.



[www.expedeon.com](http://www.expedeon.com)  
[info@expedeon.com](mailto:info@expedeon.com)

UK Tel: +44 (0) 1223 873 364  
US Tel: 858-457-7978  
US Toll-Free: +1 844-611-3656

Use and Use Restrictions: The Products are sold, and deliverables of any services are provided for the purposes of the buyer's internal in vitro research, development or educational use only, not for in vivo, or any therapeutic or diagnostic use, nor for resale, or for providing services or any other commercial use of any kind, including without limitation, for any transfer in any form (including as part of a kit) to a third party, for analysis or reverse engineering of the Product or for manufacturing. Products should only be used in accordance with any safety data sheets, guidance or protocols that we issue from time to time and are available for download from our Site. Protective clothing should be used at all times when handling our Products. Safety datasheets relating to all Products are available for download from the Site or upon request. Expedeon grants no other license or rights under any intellectual property in respect of Products or services deliverables and in particular grants no license to use any Product or deliverables for any commercial purposes. Sale of Products or service deliverables by us or our authorised distributors are expressly conditional upon the customer's agreement with these restrictions, which the customer gives upon placing an order for Products or deliverables. If you wish to use any Product or deliverables for any purpose other than your own internal research as described above, you will require an additional licence from Expedeon. Please contact [licensing@expedeon.com](mailto:licensing@expedeon.com).