

Profinia Applications, Software and Firmware, Parts, Consumables, and Literature



The Profinia protein purification system:

- Automates all types of affinity purifications with time-saving and easy-to-use features
- Accommodates multiple accessories and optional parts to meet user purification needs
- Is designed for different types of affinity purification using a variety of purification kits
- Is well documented with literature that guides you through different applications

Profinia Applications

The Profinia system offers many types of affinity purifications using either preprogrammed methods or user-programmed methods (see instruction manual for details):

Preprogrammed Methods (Bio-Rad Methods)

Methods include native IMAC for (His)-tagged protein purification with or without desalting, denaturing IMAC, GST with or without desalting, protein A and G with or without desalting, Profinity eXact™ purification with or without desalting, and desalting only.

Loading Volume — Up to 50 ml filtered lysate or supernatant; for larger volumes or when modifying protocols, use Program Methods.

Program Methods

Methods include all the preprogrammed methods, MBP- and *Strep*-tagged protein purifications; other tagged proteins (with proper buffer, wash, cleaning, and storage buffer conditions, but not validated on the Profinia system).

Loading Volume — Up to 999 L filtered (0.45 µm or 0.2 µm filter) of lysate or supernatant; when larger volume (>50 ml) is needed, use external tubing for sample loading (See section 11 in manual).

Profinia Software and Firmware

If you purchased the Profinia software and firmware after June 10, 2008, your system will have updated versions preinstalled. If your system was bought before this date:

Profinia Software

Version 2.0 is available to replace Version 1.0 as of June 10, 2008. Call Bio-Rad Technical Support (1-800-424-6723, option 2) to get the updated version.

Profinia Firmware

Latest firmware — main board v1.40; pump and valves (PV) v2.01, are available for downloading at the Bio-Rad website. For best performance, use new (brown) inlet check valves (#620-0413) with PV firmware 2.01. To check the firmware version of the Profinia system, go to Data/Utilities on the home screen, select Maintenance/Functions, and then Display Firmware Versions. For proper use of Protein A or Profinity eXact purification methods, the main board firmware should be updated to v1.40.

Profinia Parts and Consumables

Profinia System Parts

Accessories

- Cooling unit for operation at cold temperatures (#620-0401)
- Inlet filter pack for filter changes every 2 to 6 months (#620-0404)
- Bottle starter pack for buffers (#620-0231)
- pH monitor kit (#620-0411)

Fittings and Other Parts

- Fittings (#732-0112) to use GE HiTrap cartridges on the Profinia system; for others, call Technical Support
- Check valves (inlet, #620-0413; outlet, #620-0414)
- UV flow cell replacement kits (#620-0416)

Profinia System Consumables

Buffer Kits

- Starter kits contain control lysate for instrument and method standard purification testing (#620-0229 for IMAC; #620-0230 for GST)
- Purification kits for His- and GST-tagged protein purifications, and desalting contain corresponding buffer kit with 1 ml or 5 ml cartridges (Native IMAC: #620-0225 and #620-0235; denaturing IMAC: #620-0227 and #620-0237; GST: #620-0226 and #620-0236; desalting: #620-0228 and #620-0238)
- Buffer kits for for His- and GST-tagged protein purifications, and desalting (native IMAC: #620-0221; denaturing IMAC: #620-0222; GST: #620-0223; desalting: #620-0224)

Bio-Scale™ Mini Cartridges

- **IMAC purification** — 1 ml and 5 ml cartridges (#732-4610, #732-4612, and #732-4614)
- **GST-tagged protein purification** — 1 ml and 5 ml cartridges (#732-4620, #732-4622, and #732-4624)
- **Protein A and G purification** — 1 ml and 5 ml cartridges (Affi-Prep® protein A: #732-4600 and #732-4602; UNOsphere SUPrA™ media: #732-4200, #732-4201, and #732-4202)
- **Profinity eXact cartridges** — 1 ml and 5 ml cartridges (#732-4646, #732-4647, and #732-4648)

Product Literature Bulletin Numbers

Profinia System and Accessories

Profinia system	5510, 5541, and 5573
Profinia software	5544
Profinia accessories	5548
Profinia cartridges	5574 and 5584
Instruction manual	10006036E

Profinia Purification Methods

Protein desalting method	5539
His-tagged protein purification methods	5514
GST-tagged protein purification methods	5513
Protein A and G purification methods	5701B, 5712, and 5726
Profinity eXact purification methods	5725, 5742, 5766, and 5770
MBP-tag and <i>Strep</i> -tag methods	5741 and 5744

All literature can be downloaded from the Bio-Rad website at no charge.

Purification and preparation of fusion proteins and affinity peptides containing at least two adjacent histidine residues may require a license under U.S. patents 5,284,933 and 5,310,663, including foreign patents (assignee: Hoffmann-La Roche).

Expression and purification of GST fusion proteins may require a license under U.S. patent 5,654,176 (assignee: Chemicon International).

Profinity eXact vectors, tags, and resins are exclusively licensed under patent rights of Potomac Affinity Proteins. This product is intended for research purposes only. For commercial applications or manufacturing using these products, commercial licenses can be obtained by contacting the Life Science Group Chromatography Marketing Manager, Bio-Rad Laboratories, Inc., 6000 Alfred Nobel Drive, Hercules, CA 94547, Tel (800)4BIORAD.

HiTrap is a trademark of GE Healthcare group companies.



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