

Important Note

Dear customer,

We are pleased to inform you that we now offer a new and improved resin for the purification of GST-tagged proteins. QIAGEN's new Glutathione HiCap Matrix and Glutathione HiCap Cartridge have an **increased binding capacity of up to 50%**, providing you with improved performance and highly reproducible results.

Please note that Glutathione HiCap Matrix and Glutathione HiCap Cartridge replace our existing products — Glutathione Superflow and Glutathione Superflow Cartridge, respectively. The catalog numbers remain unchanged.

In addition, we wish to inform you that Table 1 on pages 10–11 of the *Glutathione Affinity Handbook, Second Edition, May 2011*, is incorrect. Please refer instead to this table:

Table 1. Characteristics of Glutathione HiCap Matrix and Glutathione HiCap Cartridges

	Glutathione HiCap Matrix	1 ml Glutathione HiCap Cartridge	5 ml Glutathione HiCap Cartridge
Support	Agarose (7.2%, WorkBeads™ 40)		
Suspension (slurry) concentration	50%	–	–
Bead diameter	40 μ m (distribution range 32 – 60 μ m)		
Ligand	Glutathione (Glu-Cys-Gly tripeptide)		
Column dimensions (mm)	–	6.7 x 28.0	14.7 x 29.8



Table 1. Continued

	Glutathione HiCap Matrix	1 ml Glutathione HiCap Cartridge	5 ml Glutathione HiCap Cartridge
Maximum pressure*	10 bar, 1.0 MPa	5 bar, 0.5 MPa	5 bar, 0.5 MPa
Typical back pressure (aqueous buffer, 10% glycerol, at room temperature)	–	1.0 bar, 0.1 MPa (1 ml/min)	2.0 bar, 0.2 MPa (5 ml/min)
Recommended flow rate [†]	–	0.25–1 ml/min (45–155 cm/h)	1.25–5 ml/min (45–155 cm/h)
Maximum flow rate [‡]	1560 cm/h	10 ml/min (1560 cm/h)	40 ml/min (1560 cm/h)
Column connections	–	See Table 3, page 14	
Cartridge connectors	–	1/16" (inlet); M6 (outlet)	
Cartridge body material	–	Polypropylene	
System compatibility	–	Automated chromatography systems (e.g., ÄKTA, FPLC™, BioLogic, Profinia)	
pH stability	3–12		
Chemical stability	All commonly used aqueous buffers; avoid strong oxidizing reagents and high temperatures; resistant to short exposure to denaturants (e.g., 6 M GuHCl), organic solvents (e.g., 70% ethanol), 1% (w/v) SDS, and aqueous solutions for cleaning-in-place (e.g., 0.1 M NaOH, 0.1 M HCl)		
Binding capacity [§]	Up to 20 mg/ml	Up to 20 mg	Up to 100 mg

Table 1. Continued

	Glutathione HiCap Matrix	1 ml Glutathione HiCap Cartridge	5 ml Glutathione HiCap Cartridge
Storage conditions	Store Glutathione HiCap Matrix and Cartridges in 20% (v/v) ethanol at 2–8°C		

* The maximum pressure usable with the matrix itself is 10 bar. However, stability of the cartridges is only guaranteed up to 5 bar.

† Recommended flow rate refers to the binding and elution steps; equilibration, washing, and cleaning may be performed at higher flow rate (up to 2 ml/min, 310 cm/h, 1 ml cartridge).

‡ High flow rates may lead to reduced recovery of GST-tagged proteins.

§ Please note that the actual binding capacity is protein-dependent.

We apologize for any inconvenience that this may have caused.

If you have any questions, please call one of the QIAGEN Technical Service Departments or distributors (see back cover of handbooks or visit www.qiagen.com).

Best regards,

QIAGEN

Trademarks: QIAGEN® (QIAGEN Group); FPLC™ (GE Healthcare);
WorkBeads™ (Bio-Works Company Limited).

