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A Geno Technology, Inc. (USA) brand name

# G-Trap™ FliQ FPLC Columns

(Cat. # 786-1292, 786-1293, 786-1294, 786-1295)



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## INTRODUCTION



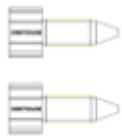
G-Biosciences present several empty low pressure chromatography columns. The columns and its parts are made of polypropylene which is chemically resistant to most of the commonly used reagents for chromatography. The end adaptors supplied with the column contain 10-32 UNF connections which are compatible with all commonly used chromatography instruments.

The maximum operating pressure for G-Trap™ 1ml FliQ FPLC Column is 5 bar and 3 bar for 5 ml, 10 ml and 20 ml G-Trap™ FliQ FPLC Columns.

## ITEM(S) SUPPLIED

Cat. #	Description	Size
786-1292	G-Trap™ 1ml FliQ FPLC Column	1 Column
786-1293	G-Trap™ 5ml FliQ FPLC Column	1 Column
786-1294	G-Trap™ 10ml FliQ FPLC Column	1 Column
786-1295	G-Trap™ 20ml FliQ FPLC Column	1 Column
786-1296	10.32 packing connector (1pc)	1

### G-Trap™ 1ml FliQ FPLC Column Parts:

Column Part for 1ml Column	Description
	Internal diameter of 6.2 mm with volumetric marks at 0.1 ml intervals. Contains a locking mechanism at both ends. Quantity supplied: 1
	Contains a 10-32 UNF female thread at one end and an O-ring and frit disc at the other end. This results in a minimum void volume. Quantity supplied: 2
	10-32 UNF male thread. Used to create a finger-tight seal for a packed column. Quantity supplied: 2

## STORAGE CONDITIONS

Columns are shipped under ambient temperature along with its connectors. Store at RT when not packed with resin. Store at 4°C when packed with resin.

## ADDITIONAL ITEMS REQUIRED

- 10.32 packing connector (1pc) (Cat. # 786-1296). It's a leur/thread connector used to connect syringes to 6.2 mm, 11 mm and 16 mm i.d. columns.
- Resin slurry

## SPECIFICATIONS

- Maximum pressure for G-Trap™ 1ml FliQ FPLC Column is 5 bar (70 psi)
- Maximum pressure for 5 ml, 10 ml and 20 ml G-Trap™ FliQ FPLC Columns is 3 bar (42 psi)
- pH stability: 2-14
- Recommended flow rate: 0.5-2 ml/ min
- Chemical compatibility: Resistant to all common aqueous buffers, denaturants including 8M urea, 6 M guanidine hydrochloride and chaotropic salts
- G-Trap™ 1ml FliQ FPLC Column housing: Medical grade polypropylene
- G-Trap™ FliQ FPLC 5 ml, 10 ml, 20 ml Columns housing: Acrylic
- Bed dimensions for G-Trap™ 1ml FliQ FPLC Column: 33 x 6.2 mm
- Bed dimensions for G-Trap™ 5ml FliQ FPLC Column: 52 x 11 mm
- Bed dimensions for G-Trap™ 10 ml FliQ FPLC Column: 104 x 11 mm
- Bed dimensions for G-Trap™ 20 ml FliQ FPLC Column: 100 x 16 mm
- End adaptors: polypropylene; 10-32 UNF female thread (1/16")
- Stop plug: 10-32UNF male thread (1/16")

## G-TRAP™ FLIQ FPLC COLUMN PACKING

### **Packing of G-Trap™ 1ml FliQ FPLC Column**

1. Insert the End adaptor into one end of the column body.  
**NOTE:** *Make sure that the catch of the tab of End Adaptor is aligned with open groove on top of the column body and push the adaptor till its completely engages with the shoulder of the column.*
2. Screw 10.32 packing connector (not supplied with column) to the End Adaptor.
3. Use a syringe pre-filled with 1-2 ml of deionized (DI) water to fill the column to a level of 0.2-0.3 ml.
4. Fill the column with 50% resin slurry and with a syringe suck the resin bed down.  
**NOTE:** *Take care not to dry resin when packing the column*
5. Repeat step4 until the packed volume is reached.  
**NOTE:** *Desired packed volume depends upon the type of resin used. For agarose based resin, packed volume should be in range 1.2 -1.4 ml.*
6. Keep the syringe in place and pipette DI water to fully fill the column.
7. Insert the top End Adaptor down carefully such that air bubbles are not trapped. Push it down gently till the liquid reaches the thread.
8. Screw a Stop Plug finger tight to seal the top of the column.

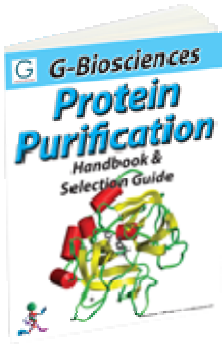
9. Push the top End Adaptor down till it is fully locked.
10. Remove the 10.32 packing connector (1pc) and the syringe. Screw the bottom End Adaptor finger tight with another Stop Plug provided with the column.

### ***Packing of G-Trap™ FliQ FPLC 5ml, 10 ml and 20 ml Columns***

1. Use storage buffer to moderately dampen the double O-rings in each End Adaptor.
2. Insert the End Adaptor into one end of the Column Body carefully, avoiding the direct contact of mesh with the column wall. Push the adaptor till its fully engaged in the column body.
3. Screw 10.32 packing connector (not supplied with column) to the End Adaptor.
4. Keep the open side of column upward and vertical and hold the column with stand.
5. Fill syringe with 2-5ml of DI water or storage buffer and fill the column to level of 1-2 ml.  
**NOTE:** Use 20 ml syringe for 5 ml and 10 ml columns, and 50 ml syringe for 20 ml column.
6. Shake the resin bottle to bring resin in suspension and pipette 50 % slurry into the column. With the syringe suck the bed down without drying the resin.  
**NOTE:** The bed permeability decreases with increase in bed height.  
**NOTE:** 1 cm column is equal to approximately 1 ml bed volume for 5 ml and 10 ml columns and 2 ml bed volume for 20 ml columns.
7. Repeat the step 6 until the packed volume reaches the target level.  
**NOTE:** During packing empty the syringe if it is full of the storage buffer or water.  
**NOTE:** Desired packed volume depends upon the type of resin used. For agarose based resin, packed volume should be 6 ml for 5 ml column, 12 ml for 10 ml column and 24 ml for 20 ml column.
8. Keep the syringe in place and make sure there is at least 5 ml additional capacity in the syringe.
9. Pipette in water or storage buffer to the top of column. Insert the top End Adaptor down carefully such that air bubbles are not trapped. Push it down slowly till two O-rings are inserted into the column body.
10. Screw a Stop Plug finger tight to seal the top of the column.
11. Push the top End Adaptor down till it is fully locked.
11. Remove the 10.32 packing connector (1pc) and the syringe. Screw the bottom End Adaptor finger tight with another Stop Plug provided with the column.
12. Pump through 10CVs of equilibration buffer at a flow rate at least 30% higher than operational flow rate. The column is ready to use or to storage at 4°C.  
**NOTE:** Ensure that the back pressure always remain under 3 bar

## RELATED PRODUCTS

Download our Sample Preparation and Protein Purification Handbooks.



<http://info2.gbiosciences.com/complete-protein-purification-handbook>

For other related products, visit our website at [www.GBiosciences.com](http://www.GBiosciences.com) or contact us.

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