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13 Gel filtration

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GUIDELINES

Refer to the operating instructions of AKTApure.

MATERIALS

NAME Y	CATALOG # ~	VENDOR
AKTApure	/	Ge Healthcare
buffer(25mMTris® 150mMNaCl®pH8.0)	/	

BEFORE STARTING

- 1. Keep the protein sample on ice all the time in order not to inactivate it.
- 2. Use the reset programs stored in computer instead of setting it each time.
- 3. Check the front pressure of the column to prevent damage to the machine.

Choice of Gel

1 According to the size of the target protein, firstly select the appropriate gel to adapt to the size of protein.

Column equilibrium

2 Connect the proper column which adapts to target protein to AKTA high pressure tomographic system, use buffer of gel filtration chromatography (buffer: 25mMTrisil 150mMNaClipH8.0) to prebalance the column of gel filtration chromatography of about 1.5 columns.

Sample concentration

3 Concentrate the protein to less than 1mL by centrifuging at 4°C, 3400rpm for 10 minutes in a high-speed centrifuge to remove insoluble substances and bubbles.

§ 4 °C ⊚3400 rpm ⊙00:10:00 ⊒1 ml

Add Sample

4 Add the protein to the column of gel filtration chromatography through a 1mL sample collecting loop. The protein is eluted at a flow rate of 0.5mL/min. The eluent was collected according to the peak position.

■1 ml

5 Use SDS-PAGE to check the result.

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