Elabscience®

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（FOR RESEARCH USE ONLY. DO NOT USE IT IN CLINICAL DIAGNOSIS !）

Focurose 6B (6B)

Catalog No: E-CM-GF02

This manual must be read attentively and completely before using this product.

May you have any problems, please contact our Technical Service Center for help.

Phone: 240-252-7368(USA) 240-252-7376(USA)
Email: techsupport@elabscience.com
Website: www.elabscience.com

Please kindly provide us the lot number (on the outside of the box) of the kit for more efficient service.

Please read this manual carefully before use to ensure the performance and successful operation. If you have any questions, please contact our Technical Support.

Product introduction

Focurose 6B is suitable for components separation and moderate purification of biological macromolecules (remove the small molecular weight impurities), such as virus, macromolecule proteins, superhelix DNA, polysaccharide and macromolecular complex.

Advantages

1. High (physical and chemical) stability, high flow rate (component separation), high recovery rate (up to 95%).
2. The moderate elution conditions can completely preserve the biological activity and function of biological macromolecules.
3. Easy to be implemented.
4. Easy to maintain.

Performance index

Matrix	6% agarose
Particle size range	45-165 μm
Average particle size	90 μm
Fractionation range (Globular Proteins)	1×10^4~4×10^6
pH stability	4-9 (long term) 3-11 (short term)
Chemical stability	All of the common buffers, 8M urea, 6M Guanidine hydrochloride
Flow rate	100-200 cm/h (Column bed height: 30 cm. Inner diameter of column: 5 cm.)
Maximum flow rate*	14 cm/h
Pressure	≤0.02 MPa
Storage buffer	20% Ethanol
Storage temperature	4~30℃

*: Maximum flow rate actually used.

Cleaning

The excellent performance of media (e.g. loading ability, mobility, column efficiency, etc.) can be recovered after cleaning the strong coupling substance (e.g. some strong coupling protein, denatured protein, lipids, etc.).

It is recommended to wash the media after used for each 10 times. The exact washing frequency should be adjusted according to the cleanliness of the purified sample.

1. Wash the media with 3~5 column volumes of 0.5M NaOH and ensure that the media immersed in the solution for 0.5~1 hour, then wash the media to neutral with purified water.
   Note: This procedure is used to remove the precipitated proteins.
2. Store the media after washed with 5~10 column volumes of 20% ethanol.
   Note: 20% ethanol can prevent the growth of microorganism. Media preserved with 20% ethanol can be stored at 4~30℃.

Trouble shootings

Problem	Possible cause	Suggestion
The chromatographic peak rises slowly	The media was loaded too tight.	Reload the column.
The chromatographic peak trails	The media was loaded too loose.	Reload the column.
The column bed cracks or being dry	Leakage occurred or a large volume of bubbles was introduced.	Check whether there is leakage or bubble, reload the column.
Low resolution	Inappropriate media.	Confirm whether the applied medium is appropriate.
	Poor column efficiency.	Determine the column efficiency.
	Overloading of sample volume.	Optimize the optimum sample amount.
	Flow rate is too fast.	Optimize the optimum flow rate.
	There is microbial grow in the media.	Change the medium.
Flow of the column is exceedingly slow	Protein or lipids accumulate in the media.	Wash the media or filter membrane timely.
	Protein precipitates in the media.	Adjust the content of equilibrium liquid and wash buffer to maintain the stability of target compound and combining efficiency of media.
	There is microbial grow in the media.	Filter and degas all the reagents. Samples must be centrifuged or filtered before loading.