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A Geno Technology, Inc. (USA) brand name

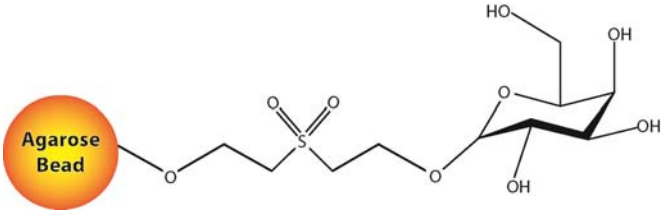
Immobilized D-Galactose

For the Purification of Lectins, Galactosidases & Galactose Binding Molecules

(Cat. # 786-391)

INTRODUCTION

G-Biosciences Immobilized D-Galactose is for the purification of lectins, galactosidases and other galactose-, *N*-acetylgalactosamine- or carbohydrate binding molecules. Specific applications include the purification of galactosidases, C-type lectins, enterotoxins and cholera toxin. The resin consists of 6% beaded agarose that is covalently coupled to thio-α-D-galactose and has a binding capacity of >20mg jacalin per millimeter of settled resin.



ITEM(S) SUPPLIED (Cat. # 786-391)

Description	Size
Immobilized D-Galactose	5ml

Supplied as a 50% slurry in 20% Ethanol

STORAGE CONDITIONS

It is shipped at ambient temperature. Upon receipt store at 4°C, **DO NOT FREEZE**.

IMPORTANT

- **Activity:** >20mg jacalin/ml of resin
- **Support**: 6% Beaded Agarose

ADDITIONAL COMPONENTS

- Binding Buffer: 0.1M sodium phosphate, 0.15M sodium chloride, pH7.2
- Sample dialyzed against Binding Buffer
- Elution buffer: 0.1M D-Galactose
- Gravity flow columns (see related products)

PROTOCOL FOR PROTEIN PURIFICATION

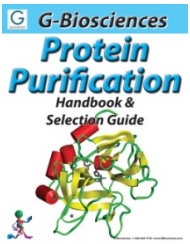
1. Aliquot an appropriate volume of slurry into a gravity column.
2. Allow the storage buffer to drain out and discard.
3. Equilibrate the resin with 10 resin volumes of binding buffer.
4. Add the prepared sample to the resin and allow to pass through under gravity.
5. Wash the column with 20-30 resin volumes of Binding Buffer or until the absorbance at 280nm of the flow-through reaches the base line.
6. Elute the bound protein with 5-10 resin volumes of Elution Buffer and collect appropriate size fractions (0.5-1ml). Some proteins may require additional Elution Buffer volumes.
7. Monitor the elution of proteins by reading the absorbances at 280nm.
8. Pool the protein containing fractions and dialyze extensively against Binding Buffer to remove D-Galactose.
9. Store column by first washing with five resin volumes of water containing 0.05% sodium azide. Store upright at 4°C in deionized water with 0.05% sodium azide.

TROUBLESHOOTING

Issue	Possible Reason	Suggested Solution
Protein of interest does not bind the resin	The protein does not have a binding site for galactose	Research galactose binding capability and optimal binding conditions
	Protein is inactive	Use extraction conditions to maintain proteins activity. We recommend our PE LB Systems.
Proteins fail to elute	Protein did not bind	Research galactose binding capability and optimal binding conditions
	Elution by competition with free galactose not appropriate	Use stronger elution method; 0.1M Glycine HCl, pH2.3

RELATED PRODUCTS

Download our Protein Purification Handbook.



http://info.gbiosciences.com/complete-protein-purification-handbook

For other related products, visit our website at www.GBiosciences.com or contact us.

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