



Galanthus Nivalis Lectin (GNL), Agarose bound

AL-1243-5

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Short Description

Agarose bound *Galanthus nivalis* lectin is prepared using our affinity-purified lectins. *Galanthus nivalis* lectin, unlike most mannose-specific lectins, is not a metalloprotein and does not require Ca^{++} or Mn^{++} for binding. Binding seems to be preferentially directed toward structures containing (α -1,3) mannose residues.

In contrast to most mannose-binding lectins, GNL will not bind α -linked glucose. Reports indicate that this lectin binds rat and mouse IgM but not IgG. The only protein from human serum reported to bind to this lectin is α 2-macroglobulin. GNL binds to many viral glycoproteins.

Features:

- Bead diameter ranges in size from 45-165 microns
- Matrix is stable in solutions at pH 3-11 as well as many organic solvents
- Immobilized lectins are prepared using affinity purified lectins
- Covalent attachment preserves lectin activity and minimizes conformational changes that might result in nonspecific or hydrophobic interactions
- Hydrophilic spacer arm is inserted between the lectin and the matrix
- Conjugated proteins are not leached off the beads by Tris or other routinely used buffers
- No residual charges present after conjugation. This minimizes non-specific binding to the matrix
- Product supplied as a 1:1 suspension in buffer
- 3 mg lectin/ml gel
- Inhibiting/Eluting Sugar: 100 mM - 200 mM α -methylmannoside or Glycoprotein Eluting Solution (ES-1100)

Additional Information

Unit Size	5 ml
Applications	Glycobiology, Affinity Chromatography
Recommended Storage	2-8 °C DO NOT FREEZE
Solution	10 mM HEPES, pH 7.5, 0.15 M NaCl, 0.1 mM CaCl ₂ , 0.01 mM MnCl ₂ , 20 mM mannose, 0.08% sodium azide
Recommended Usage	Wash gel thoroughly with buffer before use to remove sugar added to stabilize the lectin. Recommended product for eluting glycoconjugates bound to this agarose-lectin: Glycoprotein Eluting Solution, Cat. No. ES-1100. Alternatively, 0.1 M α methyl mannoside can be used. For those glycoconjugates having a very high affinity for GNL, it may be necessary to lower the pH of the eluting sugar solution to pH 4.0 with acetic acid and increase the concentration of the α methyl mannoside to 0.5 M. After use, wash the gel with several column volumes of buffered saline, then resuspend gel in buffered saline containing 0.08% sodium azide for storage.
Matrix Conjugate	Lectins
Sugar Specificity	Mannose
Conjugate	Agarose

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