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VICIA VILLOSA LECTIN (VVL, VVA), AGAROSE BOUND

SKU: AL-1233-2

DESCRIPTION

Agarose bound *Vicia villosa* lectin is prepared using our affinity-purified lectins. This lectin is a family of tetrameric glycoproteins consisting of combinations of A and B subunits similar in structure to PHA and GSL I. The dominant isolectins in our preparations appear to be B subunit-rich. VVL recognizes preferentially α- or β-linked terminal *N*-acetylgalactosamine, especially a single α-*N*-acetylgalactosamine residue linked to serine or threonine in a polypeptide (the Tn antigen).

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
• 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

For research use only. Not intended for therapeutic or diagnostic use in animals or humans.

• Product supplied as a 1:1 suspension in buffer
• Inhibiting/Eluting Sugar: 200 mM *N*-acetylgalactosamine or Glycoprotein Eluting Solution (ES-2100)

SPECIFICATIONS

Molecular Weight	105
Extinction Coefficient	0.78
Formulation	10 mM HEPES, pH 7.5, 0.15 M NaCl, 20 mM galactose, 0.08% sodium azide
Inhibiting or Eluting Sugar	GalNAc
Label Modifier Type	Lectins
Unit Size	2 ml
Storage Instructions	2-8 °C DO NOT FREEZE
Sugar Specificity	Terminal GalNAc and terminal LacdiNAc
Usage Summary	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-2100. Alternatively, 200 mM N-acetylgalactosamine can be used.Elution can also be achieved with 100 mM sodium acetate, pH 3.0, 1 M galactose. 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.
Applications	Glycobiology, Affinity Chromatography
Conjugate	Agarose

TECHNICAL INFORMATION

Agarose bound* *Vicia villosa* lectin is prepared using our affinity-purified lectins. Heat stable, cross-linked 4% agarose beads with a molecular weight exclusion limit of about 2×10^7 daltons are used as the solid-phase matrix to which the lectins are covalently coupled. The attachment of the lectins to the beads is carefully controlled to preserve lectin activity and minimize conformational changes of the bound lectins that might result in nonspecific ionic or

hydrophobic interactions. The technique we have developed to couple lectins to agarose beads inserts a hydrophilic spacer arm between the lectin and the matrix.

This coupling method provides several advantages over the traditional cyanogen bromide procedure:

- Maximum carbohydrate binding activity of the coupled lectins is retained
- Linkage is stable over a range of pH values

Our agarose bound lectins are supplied at a constant concentration of lectin per ml of settled beads. The concentration for each lectin is selected to achieve the highest glycoconjugate binding capacity per mg of lectin present in the beads. Each lot is tested for its binding capacity using glycoproteins known to bind the lectin. This provides a guideline for the user and assures the quality of our agarose bound lectins.

*3 mg lectin/ml gel

CITATIONS

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DOCUMENTS

- Safety Data Sheet
- Lectins in Histochemistry, ELISA, and Western Blot Applications
- Download CoA
- Datasheet

GALLERY IMAGES

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