



SOYBEAN AGGLUTININ (SBA), AGAROSE BOUND

SKU: AL-1013-2



DESCRIPTION

Agarose bound Soybean agglutinin is prepared using our affinity-purified lectins. Composed of four subunits of approximately equal size, soybean agglutinin is a family of closely related isolectins. This glycoprotein has a molecular weight of about 120 kDa and an isoelectric point near pH 6.0. SBA preferentially binds to oligosaccharide structures with terminal α - or β -linked *N*-acetylgalactosamine, and to a lesser extent, galactose residues. Binding can be blocked by substitutions on penultimate sugars, such as fucose attached to the penultimate galactose in blood group B substance.

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

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



- 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
- Inhibiting/Eluting Sugar: 200 mM *N*-acetylgalactosamine or Glycoprotein Eluting Solution (ES-2100)

SPECIFICATIONS

Molecular Weight	120
Extinction Coefficient	1.33
Formulation	10 mM HEPES, pH 7.5, 0.15 M NaCl, 0.1 mM CaCl ₂ , 20 mM galactose, 0.08% sodium azide, 0.01 mM MnCl ₂
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 epitopes and Forssman antigen
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, 0.2 M <i>N</i> -acetylgalactosamine in buffered saline can be used. 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

An important application for SBA is the separation of pluripotent stem cells from human bone marrow. Cells fractionated by SBA do not produce graft vs host disease and can be used in bone marrow transplantation across histocompatibility barriers.

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



Agarose bound* Soybean agglutinin 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.

*4 mg lectin/ml gel

CITATIONS

CITATIONS



Powered by Bioz © 2023 See more details on Bioz

DOCUMENTS

- [Safety Data Sheet](#)
- [Lectins in Histochemistry, ELISA, and Western Blot Applications](#)
- [Download CoA](#)
- [Datasheet](#)

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



www.vectorlabs.com

Email: customerservice@vectorlabs.com

Telephone: [\(650\) 697-3600](tel:(650)697-3600)

GALLERY IMAGES



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

[Soybean Agglutinin \(SBA\), Agarose bound](https://vectorlabs.com/products/agarose-bound-soybean-agglutinin-sba/)

<https://vectorlabs.com/products/agarose-bound-soybean-agglutinin-sba/>