

ConA Lectin (Biotin)

Cat. No. GTX01504

Application	WB, ELISA, IHC
Species	Jack Bean (<i>Canavalia ensiformis</i>)

Package
1 mg

PRODUCT

Summary

Concanavalin A is a lectin protein (MW 104kDa), homotetramer 26 kDa; originally extracted from the jack-bean, *Canavalia ensiformis*. It binds specifically to certain structures found in various sugars α -mannosyl and α -glucosyl residues in glycoproteins. It was the first lectin to be available on a commercial basis and is widely used in biology and biochemistry to characterize glycoproteins and other sugar-containing entities. It is also used to purify macromolecules in lectin affinity chromatography. Concanavalin A interacts with diverse receptors containing mannose carbohydrates (serum and membrane glycoproteins). ConA agglutinates strongly erythrocytes without being blood group specific. Normal cells are agglutinated after trypsinisation. ConA is not also a lymphocyte mitogen and reacts with many bacteria, like *E. coli*, *Dictyostelium discoideum* and *B. subtilis*, but is also widely believed to be involved in the interaction between alpha-mannosyl oligosaccharides on the surface of the HIV virus and the human T cell lymphocyte.

APPLICATION

Application Note

*Optimal dilutions/concentrations should be determined by the researcher.

Suggested dilution	Recommended dilution
WB	1:500-1:2000
ELISA	1:500-1:2500
IHC	1:250-1:1000

Not tested in other applications.

Product Note alpha-linked mannose and glucose

PROPERTIES

Form	Liquid
Buffer	10mM Bicarbonate, 150mM NaCl, 0.1mM CaCl_2 , 0.01mM MgCl_2 (Con A has an Isoelectric point of about pH4.5-5.5, requires calcium or manganese ions at each of its four saccharide binding sites. These ions should be used in buffer. DO NOT USE Phosphate buffer for dilution of this lectin as it will decrease the activity of lectin).
Preservative	0.05% Sodium azide
Storage	Store as concentrated solution. Centrifuge briefly prior to opening vial. Store at 4°C.
Concentration	5 mg/ml (Please refer to the vial label for the specific concentration.)
Region/Sequence	Native Protein
Expression System	Native Protein



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Purification	Purified from Canavalia ensiformis
Conjugation	Biotin
Note	<p>For laboratory research use only. Not for any clinical, therapeutic, or diagnostic use in humans or animals. Not for animal or human consumption.</p> <p>Purchasers shall not, and agree not to enable third parties to, analyze, copy, reverse engineer or otherwise attempt to determine the structure or sequence of the product.</p>



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