

ConA Lectin (FITC)

Cat. No. GTX01505

Applications	ICC/IF
Species	Jack Bean (<i>Canavalia ensiformis</i>)

References (1)
 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.

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
Purification	Purified from <i>Canavalia ensiformis</i>
Conjugation	Fluorescein isothiocyanate (FITC) Wavelength Absorption : 490 nm ; Emission : 520 nm. Ratio : 1.0-1.4 molecules FITC (isomer 1) per Lectin molecule.
Note	For laboratory research use only. Not for any clinical, therapeutic, or diagnostic use in humans or animals. Not for animal or human consumption. 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.



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