Catalog Number: 150710, 194069, 195283

Concanavalin A

CAS # 11028-71-0

Physical Appearance: White to off white powder

Description: Pure *Canavalia ensiformis* lectin (Con A) from Jackbean. Isolated by affinity chromatography on cross-linked dextran. Con A exists as a dimer below pH 5.0 and a tetramer in alkaline pH.

Reconstitution: Reconstitute with buffer to a final concentration of 1 $\,\mathrm{mg/ml}$

Carbohydrate Specificity: α -Mannose, α -Glucose, Branched Mannose.

Inhibitory Carbohydrate: Methyl- α -D-Mannopyranoside $>> \alpha$ -D-Mannose $>> \alpha$ -D-Glucose.

Activity: Con A is a relatively weak blood agglutinin. More than 10 ug/ml may be required to give visible agglutination of neuraminidase treated human erythrocytes.

Buffer: 0.05 M Tris, 0.15 M NaCl, 0.004 M CaCl₂, pH 7.0.

Storage: Store lyophilized powder frozen at -0° C or below, desiccated. After reconstitution the material is stable for at least 1 year when stored frozen in aliquots at -20° C with 0.1% sodium azide as a preservative.

Solubility: Soluble in water (10 mg/ml-slightly hazy, colorless solution)

Availability:

Catalog number	Description	Size
150710	Con A supplied	100 mg
	lyophilized,	250 mg
	essentially salt-free	500 mg
	and carbohydrate free	1 gm
		5 gm
195283	Con A, Highly purified,	50 mg
	essentially salt free	250 mg

		1 gm
194069	Con A, supplied as a	25 mg
	lyophilized powder of	100 mg
	15% protein and the	500 mg
	balance primarily NaCl	1 gm

References:

- 1. Goldstein, I. J., and Poretz, R. D., *The Lectins: Properties, Functions, and Applications in Biology and Medicine*. Academic Press, 1986.
- 2. Wecksler, M., et. al., Acta Cient. Venezo, v. 19, 154 (1968).
- 3. Powell, A.E. and Leon, M.A., Exp. Cell. Res., v. 62, 315 (1970).
- 4. Yamashita, U., et. al., *J. Immunol.*, v. 138, 3284-3289 (1987).
- 5. Murray, H.W., et. al., J. Immunol., v. 138, 2290 (1987).
- 6. Weiss, A., et. al., *J. Immunol.*, v. 138, 2169-2176 (1987).
- 7. Ree, H.J., Cancer, v. 51, 1639-1646 (1983).
- 8. Hori, T., et. al., Acta Neuropath. (Berlin), v. 66, 177 (1985).
- 9. Reeke, G.N. et al., Ann. N. Y. Acad. Sci., 234, 369 (1974)
- 10. Kalb, A. J. and Lustig, A., *Biochim. Biophys. Acta*, **168**, 366 (1968)
- 11. Gunther, G. R. et al., Proc. Soc. Natl. Acad. Sci., 70, 1012 (1973)
- 12. Ed. Bittiges, H. and Schnebli, H.P., J. Wylie and Sons, *Concanavalin A as a Tool*, London (1976)
- 13. Merck Index, 12th Ed., No. 2559