# **PRODUCT INFORMATION Pure Lectin**

Catalog Number:	L-1104-1g
Description:	Pure Canavalia ensiformis lectin (Con A) from Jackbean.
Lot Number:	
Protein Concentration: (Based on OD 280)	1g affinity purified Con A / vial. Reconstitute with Buffer to a final concentration of 1mg/1ml.
Carbohydrate Specificity:	$\alpha$ -Mannose, $\alpha$ -Glucose, Branched Mannose.
Inhibitory Carbohydrate:	$Methyl  \alpha \text{-} D \text{-} Mannopyranoside >> \alpha \text{-} D \text{-} Mannose >> \alpha \text{-} D \text{-} Glucose.$
Activity:	Con A is a relatively weak blood agglutinin More than 10 $\mu g/ml$ may be required to give visible agglutination of neuraminidase treated human erythrocytes.
Buffer:	0.05M Tris - 0.15M NaCl - 0.004M CaCl <sub>2</sub> , pH 7.0.
Storage:	Store lyophilized powder refrigerated at 5-8°C or frozen. Store liquid frozen in aliquots. Avoid freeze-thaw cycles. Clarify by centrifugation.
Stability:	The lyophilized material is stable for several years when stored frozen. After reconstitution the material is stable for at least 1 year when stored frozen in aliquots with 0.05% sodium azide added as a preservative.
Caution:	Refer to the enclosed MSDS for information regarding lectins. The aluminum seals have sharp edges and the vial itself may have cracks which can cause lacerations. Use caution when opening the vial. MITOGENIC.
Remarks:	Con A exists as a dimer below pH 5.0 and a tetramer in alkaline pH.
References:	<ol> <li>Goldstein, I. J. and Poretz, R. D. (1986). The Lectins: Properties, Functions, and Applications in Biology and Medicine. Academic Press.</li> <li>Wecksler, M., et al. (1968). Acta Cient. Venezo. 19 : 154.</li> <li>Powell, A. E. and Leon, M. A. (1970). Exp. Cell. Res. 62 : 315.</li> <li>Yamashita, U., et al. (1987). J. Immunol. 138 : 3284-3289.</li> <li>Murray, H. W., et al. (1987). J. Immunol. 138 : 2290.</li> <li>Weiss, A., et al. (1987). J. Immunol. 138 : 2169-2176.</li> <li>Ree, H. J. (1983). Cancer. 51 : 1639-1646.</li> <li>Hori, T., et al. (1985). Acta Neuropath. (Berlin). 66 : 177.</li> </ol>

**LABORATORIES, INC.** 107 North Amphlett Blvd. San Mateo, CA 94401

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Tel: 650-342-3296 Fax: 650-342-2648 Orders: 1-800-821-0044 (Outside CA only)



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## MATERIAL SAFETY DATA SHEET

Effective Date: March 31, 2006 Revision 5 Page 1 of 2

## PRODUCT IDENTIFICATION

Name:	Crude and purified protein and enzymes.
Catalog	P-01, 2402, 2404, EC-32118, EC-32118S, EC-34424, EC-34424, BA-000, BA-002,
Number (s):	NP-01 to NP-05, B-1201 to B-4601, L-1102 to L-9000, AT-2100 to AT-2701, AF-
	001 to AF-2354, AL-1104 to AL-4701,13-600 to 13-607, DM1011P to DM1064P.
Formula:	Complex polypeptides.
Synonyms:	Protein A, Horseradish Peroxidase, Laminin (mouse), Neuraminidase, Bromelain,
	Avidin (egg white), Glycosylated Bovine Serum Albumin, Lectins, Secondary and
	Monoclonal Antibodies, other Antisera.

## EMERGENCY INFORMATION

EY Laboratories, Inc. 107 North Amphlett Blvd. San Mateo, CÂ 94401

**EMERGENCY PHONE:** 650-342-3296

## HAZARDOUS COMPONENTS

Specific protein (s) as listed on the vial label. Solutions are at a concentration generally greater than 0.5mg protein / ml. Powders are generally greater than 95% specific protein unless otherwise indicated on the vial label or product information sheet. Biological activity of these proteins will vary. Although these materials are not generally considered to be hazardous they may cause allergic responses in sensitive individuals if inhaled or allowed to contact skin.

## **HEALTH HAZARD INFORMATION**

ROUTES OF EXPOSURE:	allergic reaction with exposure. Inhalation of powders and skin contact with liquids are the primary routes of exposure. Care should be taken to avoid the formation of aerosols when handling any of the solutions.
EFFECTS OF OVEREXPOSURE:	Any of these proteins may cause acute localized eye, skin, or mucous membrane irritation. Some sensitive individuals may develop a chronic
	been thoroughly investigated. Care should be taken when handling any of these materials.
EXPOSURE LIMITS:	None established. The toxicological properties of these products have not

#### PHYSICAL CHARACTERISTICS

Powders may be white to amber brown in color. Solutions may be translucent APPEARANCE: to a clear brown SOLUBILITY: Powders are completely soluble in many biological buffers. Some are soluble in water. All liquids are completely miscible in water and biological buffers

## FIRE AND EXPLOSION HAZARDS

EXTINGUISHING MEDIA SPECIAL FIRE FIGH NG RECAUTIONS:

Not considered to be a fire hazard. Water spray or CO 2. None required.

NOTE: Most solutions contain 0.05% sodium azide as a preservative. Azide may react with lead and copper plumbing to form explosive metal azides. Flush with copious amounts of water when disposing material in the sink.

#### **REACTIVITY DATA** STABILITY.

OT/DIEITT:
HAZARDOUS POLYMERIZATION
INCOMPATIBILITY

Stable. Decomposition products are not known to be hazardous. Will NOT occur. None known. (Lead and copper may react with sodium azide).

## SPILL / LEAK PROCEDURES

SFILL / LEAK FROCEDO	RE3
MATERIAL RELEASE /	Avoid contact with powder or liquid. Clean up spill with a paper towel
SPILL:	soaked in household bleach. Do not allow solutions to dry on
	environmental surfaces. Wash affected area with detergent after the area
	has been treated with bleach.
WASTE DISPOSAL:	Incinerate, autoclave, or dispose of paper waste in accordance with all
	Local, State, and Federal regulations. Due to the small quantities of material involved these products are generally not considered to be
	environmental hazards. All of these proteins are fully biodegradable.

### EMERGENCY FIRST AID PROCEDURES

May be harmful if swallowed, inhaled, or allowed to absorb through the skin. Wash contacted area with water for 15 minutes. If inhaled remove to fresh air, Report exposure to the appropriate safety official. Consult a physician if irritation occurs or if there is any indication of an allergic response such as watering eves, sneezing, or difficulty breathing

#### SPECIAL HANDLING PRECAUTIONS

VENTILATION:	No special ventilation is required but it is recommended to handle these
	reagents in a fume hood when possible.
EYE PROTECTION:	Not required under most circumstances but recommended as a safety
	precaution.
RESPIRATORY	Recommended as a safety precaution, specifically when working with
PROTECTION:	powders. An approved respirator may be required for those individuals
	already known to be sensitive to these materials.
PROTECTIVE GLOVES:	Required when handling any of these materials.
TROTECHTE GEOVES.	Required when handling any of these materials.

## SPECIAL PRECAUTIONS

This material is for research and experimental application only. It is not intended for food, drug, household, agricultural, or cosmetic use. All materials should be handled only by technically qualified individuals experienced with working with potentially hazardous chemicals. The above information is correct to the best of our knowledge. The user should make independent decisions regarding completeness of the information, based on all sources available. EY Laboratories, Inc. shall not be held liable for any damage resulting from handling or contact with the above product.



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