PRODUCT INFORMATION Avidin

Catalog Number: BA-102-5

Description: Avidin (egg white) - Rhodamine (TRITC)

Lot Number:

Protein

5 mg pure Avidin-Rhodamine (TRITC) / 5 ml Buffer.

Concentration: (Based on OD 280)

Daseu on OD 20

Purification Gel filtration performed after conjugation to remove free rhodamine.

Procedure:

Specificity: One mole of Avidin (MW 67,000) binds 4 moles of Biotin (MW 244.3).

The Biotin-Avidin complex has a binding constant of 10^{15} .

Buffer: 0.01M Phosphate - 0.15M NaCl, pH 7.2-7.4. Contains 0.05% sodium

azide as a preservative.

Chemical Used for Conjugation:

Tetramethylrhodamine Isothiocyanate (TRITC).

Storage: Store liquid material frozen in aliquots in amber vials or covered with foil.

Avoid freeze thaw cycles. Clarify by centrifugation.

Fluorescent Conjugates are extremely light sensitive.

Stability: The liquid material is stable for several years when stored frozen in

aliquots with 0.05% sodium azide added as a preservative.

Caution: Refer to the enclosed MSDS for information regarding Avidin. The

aluminum seals have sharp edges and the vial itself may have cracks which can cause lacerations. Use caution when opening the vial.

Remarks: Fluorescent Conjugates are <u>extremely</u> light sensitive.

References:

Heggeness, M.H.,et.al., Use of the Avidin-Biotin Complex for the Localization of Actin and Mysin with Fluorescence Microscopy,

J. Cell Biol., 73, (1977),783.

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

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



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

MATERIAL SAFETY DATA SHEET

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

PRODUCT IDENTIFICATION

Name: Purified proteins and enzymes labeled with D-Biotin.

Catalog BAP-01, BA-1102 to BA-9000, BAF-001 to BAF-2354, BAL-1104 to BAL-4701, Number(s): BA-01 to BA-013, BA-108, BA-109, BA-111, BA-118, BA-119, BA-120, BA-121.

BAT-2100 to BAT-2701.

Formula: Complex polypeptides labeled with D-Biotin

Synonyms: Protein A, Lectins, Secondary and Monoclonal Antibodies, Horseradish

Peroxidase, Alkaline Phosphatase, Lactoperoxidase, Ferritin, and Urease labeled

with D-Biotin

NOTE: D-Biotin is also known as vitamin H.

EMERGENCY INFORMATION

EY Laboratories, Inc. 107 North Amphlett Blvd. San Mateo, CA 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 >>95% pure protein unless otherwise indicated on the vial label. Biological activity of these labeled proteins will vary. Vitamin H is an essential vitamin, required in very low amounts. The concentration of bound biotin is less than 10% of the protein amount (w/w). All solutions contain less than 0.05% sodium azide as a preservative.

HEALTH HAZARD INFORMATION

EXPOSURE LIMITS: None established. The toxicological properties of these products have not

been thoroughly investigated. Care should be taken when handling any of

these materials.

EFFECTS OF May cause localized eye, skin, or mucous membrane irritation. Some

OVEREXPOSURE: sensitive individuals may develop a chronic allergic reaction with exposure.

The known effects are due to the protein.

ROUTES OF Inhalation of powders and skin contact with liquids are the primary routes of

EXPOSURE: exposure. Care should be taken to avoid the formation of aerosols when

handling any of the solutions.

PHYSICAL CHARACTERISTICS

APPEARANCE: Powders are white to brown. Solutions will be clear to dark brown or red. SOLUBILITY: Powders are completely soluble in many biological buffers and water.

All liquids are completely miscible in water and biological buffers.

LABORATORIES, INC.
7 North Amphlett Rlyd

North Amphlett Blvd.
San Mateo, CA 94401

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

MSDS for Biotin labeled Purified Proteins Continued - page 2 of 2.

FIRE AND EXPLOSION HAZARDS Not considered to be a fire hazard.

EXTINGUISHING MEDIA: Water spray or CO₂. SPECIAL FIRE FIGHTING NOTE: None required.

NOTE: None required.

Note solutions of

Most solutions contain less than 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: Stable. Decomposition products are not known to be

hazardous.

HAZARDOUS POLYMERIZATION: Will NOT occur.

INCOMPATIBILITY: None known. (Lead and copper may react with sodium

azide)

SPILL / LEAK PROCEDURES

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

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 eyes, 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.

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.

EY LABORATORIES, INC.

107 North Amphlett Blvd. San Mateo, CA 94401 Tel: 650-342-3296 Fax: 650-342-2648 Orders: 1-800-821-0044 (Outside CA only)