PRODUCT INFORMATION Antisera to Human and Non-Human Antigens and Their Conjugates

EY Laboratories' AT & AL series antibodies are prepared by various techniques. Some antibodies are obtained by ammonium sulfate fractionation, while others are delipidated antisera. All antibodies have a high titer, however, working dilutions for each system to be studied must be determined by the investigator.

Antisera and their conjugates are intended for use in immunodiffusion, IEP, or experimentation that does not require an affinity purified antibody. Generally these antibodies and their conjugates are not monospecific, so that a small amount of non-specific binding may occur. Information on cross reactivity is not available for each antibody. If cross reactivity information is required please contact EY Laboratories, Inc.

Catalog Number: AA-2353-1

Description: Alkaline Phosphatase Conjugated Rabbit Polyclonal Antibody to Canine IgG,

1mL

Lot Number:

Expiration Date: 1 year from date of manufacture

Protein

Concentration: (Based on OD280)

Chemical Used for

Conjugation: (where applicable)

Alkaline Phosphatase

Buffer: 0.01M Phosphate -0.15M NaCl, pH 7.2-7.4. 0.05% sodium azide is added as

a preservative EXCEPT for peroxidase conjugates.

Storage: Store liquid frozen in aliquots EXCEPT for Ferritin and Alkaline Phosphatase

conjugates, which must be refrigerated, not frozen. Alkaline Phosphatase

conjugates contain up to 50% glycerol.

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

0.05% sodium azide added as a preservative.

NOTE: DO NOT add sodium azide to peroxidase conjugates.

Caution: Refer to the enclosed MSDS for information regarding affinity-purified

and podies and their conjugates. The aluminum seals have sharp edges and the test that the third that the third

Tel: 650-342-3296

pening the vial.

For Research and Laboratory Use Only.

LABORATORIES, INC.

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

PRODUCT INFORMATION Alkaline Phosphatase Enzyme Activity Assay

Chemical Principle:

En

Orthophosphoric Monoester $+ H_2O \rightarrow Alcohol + H_3PO_4$

Assay Reagents: BUFFER: 0.1 M Tris buffer, pH 8.2.

ENZYME: Dilute with 0.1 M Tris Buffer.

Acceptable dilution: 5-20 µg/ml.

SUBSTRATE: 0.001 M p-nitrophenylphosphate (P-NPP).

Procedure:

1. Add 2.9 ml substrate to Reaction test tube and 2.9 ml to Control

test tube.

2. At time = 0, add $100\mu l$ of diluted ENZYME to Reaction tube

and 100µl Tris to Control tube. Mix thoroughly.

3. Measure and record optical density at 410 nm OD(410) every 15 seconds for 3 minutes, or take end point reading after 3 minutes

by stopping reaction with 100µl of 5.0 M NaOH.

4. Use the OD(410) measurement to determine the rate of change

in absorbance per minute.

Enzyme Activity Calculations:

One unit of activity is the amount of enzyme to decompose 1 μ mole of P-NPP/minute at 25°C. 1.62 X 10^4 cm $^{-1}$ is the molar

absorbance of P-NPP.

OD(410) / min =

OD(410) / 3min - OD(410) Control / 3 minutes

3 minutes

mg enzyme / ml reaction mixture = [enzyme dilution]

30

units / mg = $\frac{OD(410) / min}{1.62 \times 10^4 ml reaction mixture}$

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) Effective Date: March 31, 2006 Revision 4 Page 1 of 2

PRODUCT IDENTIFICATION

Purified proteins or biotin labeled with Horseradish Peroxidase or Alkaline Phosphatase. Name: Catalog HP-02, BA-104, BA-105, BA-108, BA-109, H-1102 to H-9000, LA-1104 to LA-9000, Number (s): PA-2100 to PA-2701, AA-2100 to AA-2701, HAF-001 to HAF-2354, AAF-001 to

AAF-2354, HA-01 to HA-013, AA-01 to AA-013, HAL-1104 to HAL-4701, AAL-1104

to AAL-4701.

Synonyms: Protein A, Avidin (egg white), Biotin, Lectins, Secondary Antibodies labeled with

Horseradish Peroxidase or Alkaline Phosphatase.

EMERGENCY INFORMATION

EY Laboratories, Inc. **EMERGENCY PHONE:** 107 North Amphlett Blvd. 650 342 3296 San Mateo, CA 94401

HAZARDOUS COMPONENTS

Specific protein(s) as listed on the vial label. Solutions are at a concentration generally greater than 0.5mg protein/ ml. Biological activity of these labeled proteins will vary. Horseradish Peroxidase and Alkaline Phosphatase are both potent enzymes which may be harmful if ingested, inhaled, or allowed to absorb through the skin. Both enzymes are known to cause allergic responses in sensitive individuals.

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

EFFECTS OF May causes localized eye, skin, or mucous membrane irritation. Some OVEREXPOSURE: sensitive individuals may develop a chronic allergic reaction with exposure.

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 a light brown. Solutions will be light to dark brown.

SOLUBILITY: Powders are completely soluble in many biological buffers and water.

All liquids are completely miscible in water and biological buffers.

FIRE AND EXPLOSION HAZARDS

EXTINGUISHING MEDIA: SPECIAL FIRE FIGHTING PRECAUTIONS:

NOTE:

Not considered to be a fire hazard.

Water spray or CO2. None required.

Alkaline Phosphatase conjugates 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.

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107 North Amphlett Blvd. 650-342-2648 Fax: San Mateo, CA 94401 1-800-821-0044 Orders: (Outside CA only) MSDS for Horseradish or Alkaline Phosphatase Labeled Proteins & Biotin Continued - page 2 of 2.

REACTIVITY DATA

STABILITY: Stable. The nature of any decomposition products are not

known. They are not believed 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

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. Any eye contact should be reported to a physician immediately

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: Required. Goggles or safety glasses with a side shield

are recommended.

RESPIRATORY PROTECTION: Recommended as a safety precaution, specifically

> when working with 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.

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