

### RayBiotech, Inc.

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# Certificate of Analysis and Data Sheet

## **Mouse Anti Rhodamine**

Catalog No. Species Isotype
MD-14-0504 Mouse IgG1, kappa

#### Background

Rhodamine comprises a family of fluorone dyes that fluoresce and can be measured easily and inexpensively with fluorimeters. Rhodamine dyes are toxic, and are soluble in water, methanol and ethanol. Rhodamine is commonly used as a tracer in water systems to determine the rate and direction of flow and transport. Rhodamine dyes are synthesized from the condensation of phthalic anhydride with m-dialkylaminophenols. Members of the Rhodamine family include Rhodamine B (used in biology as a staining fluorescent dye), Rhodamine 6G (often used in a laser dye because of its high photostability, high quantum yield and low cost) and Rhodamine 123 (used in biochemistry to inhibit mitochondrion function, specifically the electron transport chain, thus slowing down inner respiration). Auramine O is often mixed with Rhodamine B to make an Auramine-Rhodamine stain. This stain is used histologically to see acid-fast bacilli using fluorescence microscopy.

# Preparation

This product is prepared from tissue culture from mouse with hybridization of Sp2/0 myeloma cells with spleen cells from Balb/c mice, and purified by Protein A chromatography. Its immunogen is rhodamine conjugated KLH.

# Specificity

Reacts specifically with Rhodamine and its derivatives. Rhodamine isomer 5 and isomer 6 are reactive as TAMRA, as well as TRITC conjugated protein. No reaction is observed against Texas Red.

## **Formulation**

1mg/ml purified liquid in 0.02M Potassium phosphate, 0.15M Sodium chloride, pH 7.2 with 0.01% (w/v) Sodium azide.

The products are furnished for LABORATORY RESEARCH USE ONLY.

Not for diagnostic or therapeutic use.



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### **Applications**

Table Summary of antibody applications and working conditions

Options Functions	YES	NO	Not determined	Recommended Work dilution or concentration
ELISA	•			1:5,000 to 1:50,000
Western Blotting			•	
Immunohistology - frozen			•	
Immunohistology - paraffin			•	
Immunohistology - resin			•	
Immunoprecipitation			•	
Flow Cytometry			•	
Immunofluorence staining			•	
Neutralization				

Note: Other applications are not tested yet. Optimal dilutions should be determined by each laboratory for each application.

# Storage

Upon receipt, store at  $-20^{\circ}$ C. For long term storage, aliquot and store at  $-20^{\circ}$ C. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 2-8°C as an undiluted liquid. Prepare working dilution only prior to immediate use. Expiration date is one year from date of opening. **Avoid multiple freeze/thaw cycles.** 

## Reference

- 1) Horobin, R.W. and Murgatroyd, L.B. 1970. The identification and purification of pyronin and Rhodamine dyes. Stain Technol. 44: 279-302.
- 2) Shea, C.R., Chen, N., Wimberly, J. and Hasan, T. 1989. Rhodamine dyes as potential agents for photochemotherapy of cancer in human bladder carcinoma cells. Cancer Res. 49: 3961-3965.
- 3) Prevot, P. and Soyer-Gobillard, M.O. 1994. Changes in ATP concentration, mitochondrial structures, and Rhodamine 123 binding in two marine dinoflagellates cultured in the presence of parathion. J. Eukaryot. Microbiol. 41: 60-65.

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