Datasheet for 200-301-246

Rhodamine Antibody

Overview

Description:	Anti-RHODAMINE (MOUSE) Monoclonal Antibody - 200-301-246
Item No.:	200-301-246
Size:	500 µg
Applications:	Dot Blot, ELISA, WB
Reactivity:	Rhodamine
Host Species:	Mouse

Product Details

Background:	RHODAMINE Monoclonal Antibody specifically detect dyes in the Rhodamine family. Rhodamine is a family member of the fluorone dyes. Examples are Rhodamine 6G and Rhodamine B. They are often used as a tracer dye within water to determine the rate and direction of flow and transport. Rhodamine dyes fluoresce and can thus be detected easily and inexpensively with instruments called fluorometers. Rhodamine dyes are used extensively in biotechnology applications such as fluorescence microscopy, flow cytometry, fluorescence correlation spectroscopy and ELISA.
Synonyms:	Mouse Anti-Rhodamine Antibody
Host Species:	Mouse
Clonality:	Monoclonal
Clone ID:	11H10
Format:	IgG1

Target Details

Reactivity:	Rhodamine
Immunogen Type:	Other
Immunogen:	Anti-RHODAMINE Monoclonal Antibody was produced after repeated immunizations of balb/c mice with rhodamine conjugated KLH.

Purity/Specificity:	RHODAMINE Monoclonal Antibody was protein A purified and reacts specifically with Rhodamine and its derivatives. Rhodamine isomer 5 and isomer 6 are reactive as TAMRA, as well as TRITC conjugated proteins. No reaction is observed against Texas Red.

Application Details

Tested Applications:	Dot Blot, ELISA
Suggested Applications:	WB (Based on references)
Application Note:	This protein A purified monoclonal antibody against rhodamine reacts with most derivative molecules and has been tested for use in ELISA. Optimal concentration in other immunoassays should be determined by the researcher.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:10,000 - 1:30,000
IHC:	1:1,000 - 1:10,000
WB:	1:1,000 - 1:10,000

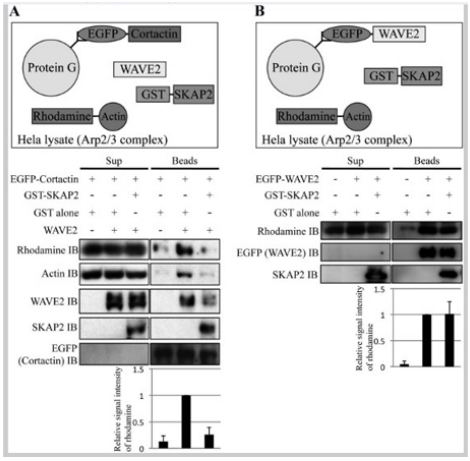
Formulation

Physical State:	Liquid (sterile filtered)
Concentration:	1.115 mg/mL by UV absorbance at 280 nm
Buffer:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Preservative:	0.01% (w/v) Sodium Azide
Stabilizer:	None

Shipping & Handling

Shipping Condition:	Dry Ice
Storage Condition:	Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.
Expiration:	Expiration date is one (1) year from date of receipt.

Images



Western Blot
SKAP2 directly inhibits actin polymerization induced by the WAVE2-cortactin complex. A, top, diagram of the actin polymerization assay. Rhodamine-conjugated monomeric G-actin, WAVE2, and GST-SKAP2 were added to cortactin-coated protein G beads. HeLa cell lysates were also added to supply the Arp2/3 protein complex. After incubation, protein G beads were separated from the reaction mixture, washed, and subjected to immunoblotting (IB). Bottom, polymerized actin, which was produced in the complex of cortactin and WAVE2, was detected using anti-rhodamine and anti-actin antibodies. WAVE2, SKAP2, and cortactin were detected using anti-WAVE2, anti-SKAP2, and anti-EGFP antibodies, respectively. Sup, reaction mixture; beads, beads fraction after incubation. B, top, diagram of the actin polymerization assay using EGFP-WAVE2-coated
beads. Bottom, polymerized actin was analyzed as A.
A and B, signal intensities of rhodamine-actin in the beads fraction were quantified. Signal intensities of lanes with WAVE2 without SKAP2 were defined as 1. The results from the three independent experiments are shown as the means ± S.D.
Fig 7.
PMID 23161539.

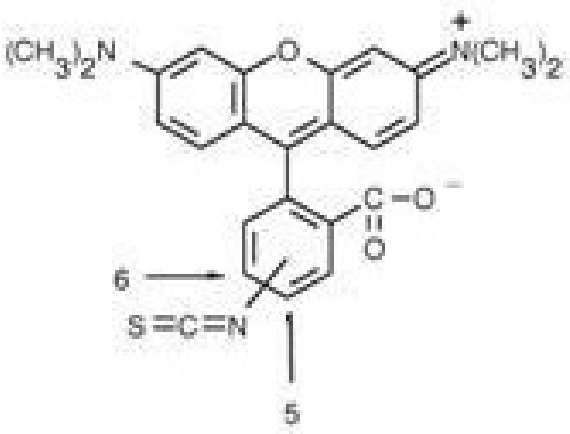
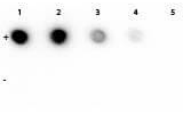


Diagram
Rhodamine core structure. TRITC (tetramethylrhodamine-5-(and-6)-isothiocyanate) is the base tetramethylrhodamine molecule functionalized with an isothiocyanate reactive group (–N=C=S) at one of two hydrogen atoms on the bottom ring of the structure. This derivative is reactive towards primary amine groups on proteins, peptides and other biomolecules. Rhodamine dyes are used extensively in biotechnology applications such as fluorescence microscopy, flow cytometry, fluorescence correlation spectroscopy and ELISA.



Dot Blot
Dot Blot of Mouse anti-Rhodamine Monoclonal Antibody. Antigen: Row 1 - Rhodamine Conjugated Streptavidin. Row 2 - Streptavidin. Load: Column 1 - 100ng. Column 2 - 33.3ng. Column 3 - 11.1ng. Column 4 - 3.70ng. Column 5 - 1.23ng. Primary antibody: Mouse anti-Rhodamine at 1:1,000 for 60 min at RT. Secondary antibody: HRP mouse secondary antibody at 1:40,000 for 30 min at RT. Block: MB-070 for 1 HR at RT.

References

- Shimamura S et al. The Src substrate SKAP2 regulates actin assembly by interacting with WAVE2 and cortactin proteins. *J Biol Chem.* (2013)

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