Order online now!

www.rockland.com
tech@rockland.com
+1 484.791.3823

Datasheet for 610-4941

Mouse IgG2a (Gamma 2a chain) Antibody Texas Red™ Conjugated

Overview

Description:	Rabbit Anti-Mouse IgG2a (Gamma 2a chain) Antibody Texas Red™ Conjugated - 610-4941
Item No.:	610-4941
Size:	1 mg
Applications:	WB, IF, Multiplex
Reactivity:	Mouse
Host Species:	Rabbit

Product Details

Background:	Anti-Mouse IgG2a Texas Red Antibody generated in rabbit detects reactivity to Mouse IgG2a (Gamma 2a chain). Secreted as part of the adaptive immune response by plasma B cells, immunoglobulin G constitutes 75% of serum immunoglobulins. IgG2, the second largest of IgG isotypes, comprises almost 25% of IgG and has a low affinity for binding to the Fc receptor of phagocytic cells. Secondary Antibodies are available in a variety of formats and conjugate types. When choosing a secondary antibody product, consideration must be given to species and immunoglobulin specificity, conjugate type, fragment and chain specificity, level of cross-reactivity, and host-species source and fragment composition.
Synonyms:	Rabbit Anti-Mouse IgG2a (Gamma 2a chain) Antibody Texas Red™ Conjugated, Rabbit Anti Mouse IgG2a Texas Red™ Conjugated Antibody
Host Species:	Rabbit
Specificity:	IgG2a
Conjugate:	Texas Red®
Clonality:	Polyclonal
Format:	IgG
F/P Ratio:	2.5

Target Details

Reactivity:	Mouse

Immunogen:	Mouse IgG2a heavy chain
Purity/Specificity:	This product was prepared from monospecific antiserum by immunoaffinity chromatography using Mouse antigens coupled to agarose beads followed by solid phase adsorption(s) to remove any unwanted reactivities. Assay by immunoelectrophoresis resulted in a single precipitin arc against anti-Rabbit Serum and Mouse Serum. Specificity was confirmed by ELISA at less than 1% cross reactivity against other mouse heavy or light chain isotypes.

Application Details

Tested Applications:	WB
Suggested Applications:	IF, Multiplex (Based on references)
Application Note:	Anti-Mouse IgG2a Texas Red Antibody has been tested by western blot and is designed for immunofluorescence microscopy, fluorescence based plate assays (FLISA) and fluorescent western blotting. This product is also suitable for multiplex analysis, including multicolor imaging, utilizing various commercial platforms.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
FC:	1:500 - 1:2,500
FLISA:	1:10,000 - 1:50,000
IF:	1:1,000 - 1:5,000

Formulation

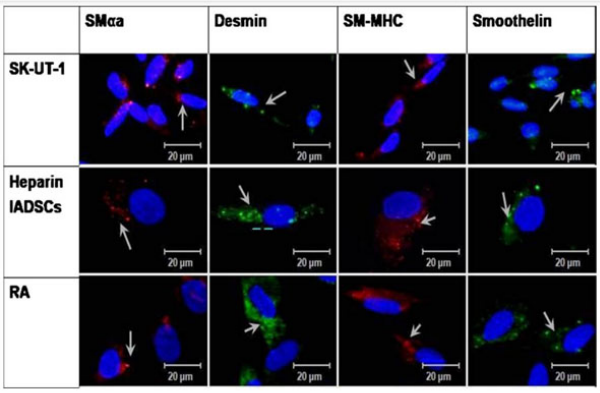
Physical State:	Lyophilized
Concentration:	1.0 mg/mL by UV absorbance at 280 nm
Buffer:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Preservative:	0.01% (w/v) Sodium Azide
Stabilizer:	10 mg/mL Bovine Serum Albumin (BSA) - Immunoglobulin and Protease free
Reconstitution Volume:	1.0 mL
Reconstitution Buffer:	Restore with deionized water (or equivalent)

Shipping & Handling

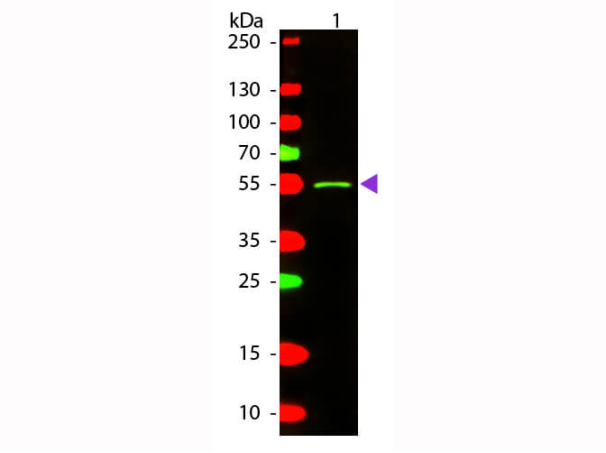
Shipping Condition:	Ambient

Storage Condition:	Store vial at 4° C prior to restoration. For extended storage aliquot contents and freeze at -20° C or below. 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



Immunofluorescence Microscopy
Isolated hADSCs (IADSCs) were differentiated into SMCs using retinoic acid (RA), heparin was used as a positive control, while SK-UT-1 cells was used as a SMC control. Expression of SMC markers smooth muscle alpha actin (SM-αa, red, Texas Red Conjugated anti-Mouse IgG2, γ2a chain specific, p/n 610–4941), desmin (green, Fluorescein Conjugated anti-Mouse IgG1, γ1 chain specific, p/n 610–4240), smooth muscle myosin heavy chain (SM-MHC, red, Texas Red Conjugated anti-Mouse κ, kappa chain specific, p/n 610–4910), and smoothelin (green, Fluorescein Conjugated anti-Mouse IgG1, γ1 chain specific, p/n 610–4240) in differentiated SMCs was determined by indirect immunofluorescence. Nuclei were counter stained with DAPI (blue). Expression of all four markers can be seen in all the cells, particularly in RA differentiated SMCs. Fig. 5. PMID: 21373882.



Western Blot
Western blot of Texas Red™ conjugated Rabbit Anti-Mouse IgG2a (Gamma 2a chain) secondary antibody. Lane 1: Mouse IgG2a. Lane 2: None. Load: 50 ng per lane. Primary antibody: None. Secondary antibody: Texas Red™ rabbit secondary antibody at 1:1,000 for 60 min at RT. Blocking: MB-070 for 30 min at RT. Predicted/Observed size: 55 kDa, 55 kDa for Mouse IgG2a (Gamma 2a chain). Other band(s): None.

References

- de Villers JA et al. Influence of low intensity laser irradiation on isolated human adipose derived stem cells over 72 hours and their differentiation potential into smooth muscle cells using retinoic acid. *Stem Cell Rev Rep.* (2011)

Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.