

Datasheet for 610-4541

## Mouse IgG2a (Gamma 2a chain) Antibody Alkaline Phosphatase Conjugated

### Overview

<b>Description:</b>	Rabbit Anti-Mouse IgG2a (Gamma 2a chain) Antibody Alkaline Phosphatase Conjugated - 610-4541
<b>Item No.:</b>	610-4541
<b>Size:</b>	1 mg
<b>Applications:</b>	Dot Blot, ELISA, WB
<b>Reactivity:</b>	Mouse
<b>Host Species:</b>	Rabbit

### Product Details

<b>Background:</b>	Anti-Mouse IgG2a Alkaline Phosphatase 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.
<b>Synonyms:</b>	Rabbit Anti-Mouse IgG2a (gamma 2a chain) Antibody alkaline phosphatase Conjugated, Rabbit Anti-Mouse IgG2a Antibody alk phos Conjugation
<b>Host Species:</b>	Rabbit
<b>Specificity:</b>	IgG2a
<b>Conjugate:</b>	Alkaline Phosphatase (AP)
<b>Clonality:</b>	Polyclonal
<b>Format:</b>	IgG

### Target Details

<b>Reactivity:</b>	Mouse
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<b>Immunogen:</b>	Mouse IgG2a heavy chain
<b>Purity/Specificity:</b>	This product was prepared from monospecific antiserum by immunoaffinity chromatography using 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-Alkaline Phosphatase (calf intestine) and anti-Rabbit Serum. Specificity was confirmed by ELISA at less than 1% cross reactivity against other mouse heavy or light chain isotypes.

## Application Details

<b>Tested Applications:</b>	Dot Blot, ELISA, WB
<b>Application Note:</b>	Anti-Mouse IgG2a Alkaline Phosphatase antibody has been tested by ELISA, dot blot, and western blot This antibody is assayed against 1.0 µg of Mouse IgG in a standard capture ELISA using pNPP p-nitrophenyl phosphate code # NPP-10 as a substrate for 30 minutes at room temperature. A working dilution of 1:1,000 to 1:5,000 is suggested for this product.
<b>Assay Dilutions:</b>	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
<b>ELISA:</b>	1:2,000 - 1:10,000
<b>IHC:</b>	1:200 - 1:1,000
<b>WB:</b>	1:500 - 1:2,500

## Formulation

<b>Physical State:</b>	Liquid (sterile filtered)
<b>Concentration:</b>	1.0 mg/mL by UV absorbance at 280 nm
<b>Buffer:</b>	0.05 M Tris Chloride, 0.15M Sodium Chloride, 0.001M Magnesium Chloride, 0.0001M Zinc Chloride, 50% (v/v) Glycerol; pH 8.0
<b>Preservative:</b>	0.1% (w/v) Sodium Azide
<b>Stabilizer:</b>	10 mg/mL Bovine Serum Albumin (BSA) - Immunoglobulin and Protease free

## Shipping & Handling

<b>Shipping Condition:</b>	Wet Ice
<b>Storage Condition:</b>	Store vial at 4° C before opening. DO NOT FREEZE. This product is stable at 4° C as an undiluted liquid. Dilute only prior to immediate use. Freezing alkaline phosphatase conjugates will result in a substantial loss of enzymatic activity.

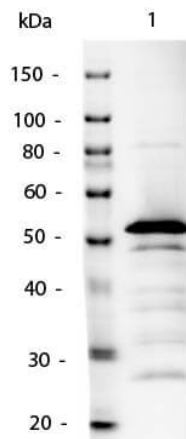
**Expiration:** Expiration date is one (1) year from date of receipt.

## Images



### Dot Blot

Dot Blot of Mouse IgG2a Antibody Alkaline Phosphatase Conjugated. Antigen: Mouse IgG2a Load: Lane 1 - 200ng Lane 2 - 66.7ng Lane 3 - 22.2ng Lane 4 - 7.4 Lane 2.5ng Primary antibody: none Secondary antibody: Mouse IgG2a Antibody Alkaline Phosphatase Conjugated at 1:1,000 for 60 min at RT. Block: MB-070 for 60 min at RT Reaction visualized using alkaline phosphatase substrate for 30 seconds at RT.



### Western Blot

Western Blot of Mouse IgG2a Antibody Alkaline Phosphatase Conjugated. Lane 1: Mouse IgG2a. Lane 2: none. Load: 50ng per lane. Primary antibody: none. Secondary antibody: Mouse IgG2a Antibody Alkaline Phosphatase Conjugated at 1:1,000 o/n at 4°C. Block: MB-070 for 30 min at RT. Reaction visualized with alkaline phosphatase substrate for 30 seconds at RT. Predicted/Observed size: 55kDa for Mouse IgG2a.

## References

- Ahmed N et al. Toxoplasma Co-infection Prevents Th2 Differentiation and Leads to a Helminth-Specific Th1 Response. *Front Cell Infect Microbiol.* (2017)

## 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.