

Datasheet for 600-401-AP1**CRTH2 Antibody****Overview**

Description:	Anti-CRTH2 (RABBIT) Antibody - 600-401-AP1
Item No.:	600-401-AP1
Size:	100 µg
Applications:	ELISA, IF, IHC, WB
Reactivity:	Human, Mouse, Rat
Host Species:	Rabbit

Product Details

Background:	The chemoattractant receptor-homologous molecule expressed on Th2 cells (CRTH2) is a recently identified receptor for the prostaglandin D2 (PGD2) in addition to the classic prostaglandin D receptor. CRTH2 is expressed on Th2 cells and eosinophils and mediates chemotaxis of these cells to PGD2 and is thus thought to be a key receptor mediating eosinophil and Th2 recruitment during allergic responses. However, CRTH2-null mice showed enhanced eosinophil recruitment into the lung consistent with observations that the CRTH2-null mice produced significantly higher amounts of interleukin-5 (IL-5) and IL-3. This suggests that CRTH2 plays a nonredundant role in restricting eosinophilia and allergic response in vivo. At least two different isoforms of CRTH2 are known to exist.
Synonyms:	CRTH2 Antibody, DP2, DL1R, CD294, GPR44, Prostaglandin D2 receptor 2, Chemoattractant receptor-homologous molecule expressed on Th2 cells, G-protein coupled receptor 44, PTGDR2
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	PTGDR2
Reactivity:	Human, Mouse, Rat
Immunogen Type:	Conjugated Peptide

Immunogen:	Anti-CRTH2 antibody was prepared from whole rabbit serum produced by repeated immunizations with a 15 amino acid synthetic peptide from near the internal region of human CRTH2.
Purity/Specificity:	Anti-CRTH2 Antibody was affinity purified from monospecific antiserum by immunoaffinity chromatography. Cross reactivity with CRTH2 from other sources has not been determined.
Relevant Links:	• UniProtKB - Q9Y5Y4 • GeneID - 11251 • NCBI - NP_004769

Application Details

Tested Applications:	ELISA, IF, IHC, WB
Application Note:	Anti-CRTH2 Antibody has been tested for use in ELISA, Western Blotting, Immunohistochemistry and Immunofluorescence. Specific conditions for reactivity should be optimized by the end user. Expect a band at approximately 43 kDa in Western Blots of specific cell lysates and tissues.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:10,000-1:20,000
IF:	20 µg/mL
IHC:	2.5 µg/mL
WB:	1-2 µg/mL

Formulation

Physical State:	Liquid (sterile filtered)
Concentration:	1 mg/mL by UV absorbance at 280 nm
Buffer:	0.01 M Sodium Phosphate, 0.25 M Sodium Chloride, pH 7.2
Preservative:	0.02% (w/v) Sodium Azide
Stabilizer:	None

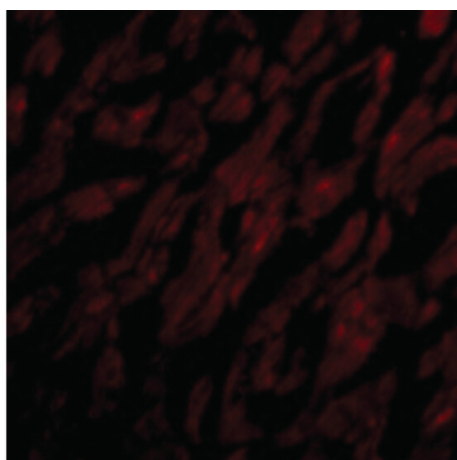
Shipping & Handling

Shipping Condition:	Dry Ice
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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.

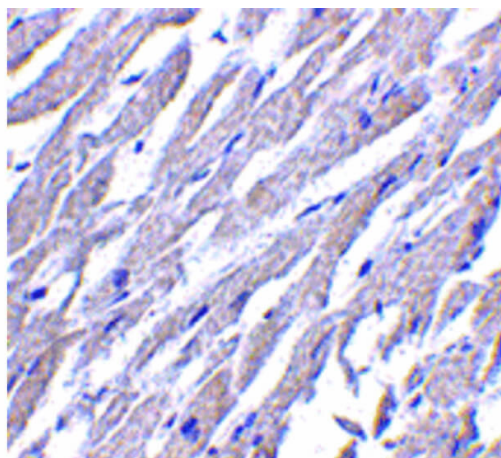
Expiration: Expiration date is one (1) year from date of receipt.

Images



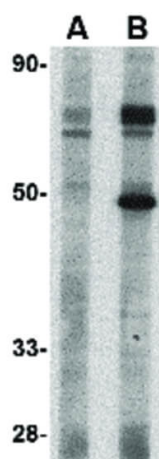
Immunofluorescence Microscopy

Immunofluorescence Microscopy of CRTH2 antibody.
 Tissue: Human heart cells. Fixation: 0.5% PFA. Antigen retrieval: not required. Primary antibody: CRTH2 antibody at 20 µg/mL for 1 h at RT. Secondary antibody: Fluorescein rabbit secondary antibody at 1:10,000 for 45 min at RT. Localization: CRTH2 is nuclear and cytoplasmic. Staining: CRTH2 as red fluorescent signal.



Immunohistochemistry

Immunohistochemistry of CRTH2 antibody. Tissue: Human heart tissue. Fixation: formalin fixed paraffin embedded. Antigen retrieval: not required. Primary antibody: CRTH2 antibody at 2.5 µg/mL for 1 h at RT. Secondary antibody: Peroxidase rabbit secondary antibody at 1:10,000 for 45 min at RT. Localization: CRTH2 is cytoplasmic. Staining: CRTH2 as precipitated red signal with hematoxylin purple nuclear counterstain.

**Western Blot**

Western Blot of CRTH2 antibody. Lane 1: Human heart tissue lysate at 1 $\mu\text{g/mL}$. Lane 2: Human heart tissue lysate at 2 $\mu\text{g/mL}$. Load: 35 μg per lane. Secondary antibody: Peroxidase rabbit secondary antibody at 1:10,000 for 45 min at RT. Block: 5% BLOTTO overnight at 4°C. Predicted/Observed size: 43.2 kDa, ~43 kDa for CRTH2.

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.