

PTGDR2 Antibody
Catalog # ASC11603**Specification**

PTGDR2 Antibody - Product Information

Application	WB, IF, E
Primary Accession	Q9Y5Y4
Other Accession	NP_004769 , 153791424
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	Predicted: 43 kDa KDa
Application Notes	PTGDR2 antibody can be used for detection of PTGDR2 by Western blot at 0.5 - 1 µg/mL.

PTGDR2 Antibody - Additional Information

Gene ID	11251
Target/Specificity	
PTGDR2;	

Reconstitution & Storage

PTGDR2 antibody can be stored at 4°C for three months and -20°C, stable for up to one year.

Precautions

PTGDR2 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

PTGDR2 Antibody - Protein Information

Name PTGDR2

Synonyms CRTH2, DL1R, GPR44

Function

Receptor for prostaglandin D2 (PGD2). Coupled to the G(i)- protein. Receptor activation may result in pertussis toxin-sensitive decreases in cAMP levels and Ca(2+) mobilization. PI3K signaling is also implicated in mediating PTGDR2 effects. PGD2 induced receptor internalization. CRTH2 internalization can be regulated by diverse kinases such as, PKC, PKA, GRK2, GPRK5/GRK5 and GRK6. Receptor activation is responsible, at least in part, in immune regulation and allergic/inflammation responses.

Cellular Location

Cell membrane; Multi-pass membrane protein. Note=Internalized receptors colocalized with RAB11A.

Tissue Location

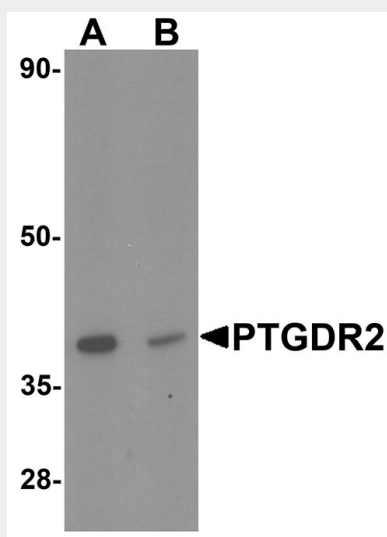
Widespread expression. High expression in stomach, small intestine, heart and thymus. Intermediate expression in colon, spinal cord and peripheral blood and low expression in brain, skeletal muscle and spleen. Expressed also on Th2- and Tc2- type cells, eosinophils and basophils.

PTGDR2 Antibody - Protocols

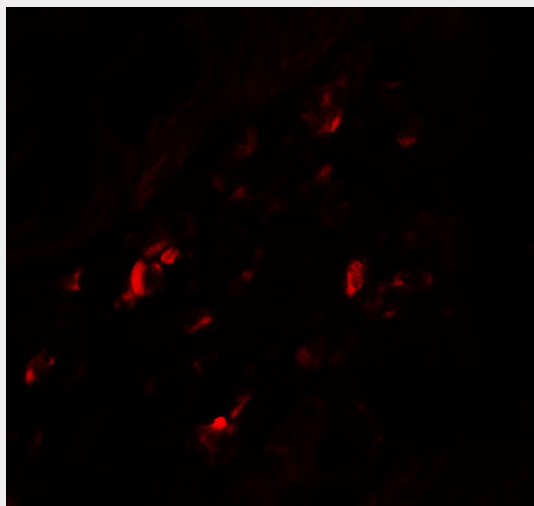
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

PTGDR2 Antibody - Images



Western blot analysis of PTGDR2 in small intestine tissue lysate with PTGDR2 antibody at 1 µg/mL in (A) the absence and (B) the presence of blocking peptide.



Immunofluorescence of PTGDR2 in human small intestine tissue with PTGDR2 antibody at 20 µg/ml.

PTGDR2 Antibody - Background

PTGDR2 Antibody: The prostaglandin D2 receptor 2 (PTGDR2), also known as 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, PTGDR2-null mice showed enhanced eosinophil recruitment into the lung consistent with observations that the PTGDR2-null mice produced significantly higher amounts of interleukin-5 (IL-5) and IL-3. This suggests that PTGDR2 plays a nonredundant role in restricting eosinophilia and allergic response in vivo.

PTGDR2 Antibody - References

Nagata K, Hirai K, Tanaka K, et al. CRTH2, an orphan receptor of T-helper-2-cells, is expressed on basophils and eosinophils and responds to mast cell-derived factor(s). *FEBS Lett.* 1999; 459:195-9.

Shichijo M, Sugimoto H, Nagao K, et al. Chemoattractant receptor-homologous molecule expressed on Th2 cells activation in vivo increases blood leukocyte counts and its blockage abrogates 13,14-dihydro-15-keto-prostaglandin D2-induced eosinophilia in rats. *J. Pharmacol. Exp. Ther.* 2003; 307:518-25.

Chevalier E, Stock J, Fisher T, et al. Cutting edge: chemoattractant receptor-homologous molecule expressed on Th2 cells plays a restricting role on IL-5 production and eosinophil recruitment. *J. Immunol.* 2005; 2056-60.