

PRODUCT INFORMATION



CRTH2/DP₂ Receptor (C-Term) Polyclonal Antibody

Item No. 10007002

Overview and Properties

Contents:	This vial contains 500 µl of peptide affinity-purified polyclonal antibody.
Synonyms:	Chemoattractant-receptor Homologous Molecule Expressed on Th2 Cells, DP ₂ Receptor, GPR44, Prostaglandin D ₂ Receptor 2
Immunogen:	Synthetic peptide from the C-terminal region of human CRTH2/DP ₂
Species Reactivity:	(+) Human, mouse, and rat; other species not tested
Uniprot No.:	Q9Y5Y4
Form:	Liquid
Storage:	-20°C (as supplied)
Stability:	≥3 years
Storage Buffer:	PBS, pH 7.2, with 50% glycerol and 0.02% sodium azide
Host:	Rabbit
Applications:	Immunocytochemistry (ICC) and Western blot (WB); the recommended starting dilution for ICC is 1:50 and 1:200 for WB. Other applications were not attempted and therefore optimal working dilutions should be determined empirically.

Description

Prostaglandin D₂ (PGD₂) elicits its biological function through interaction with two distinct G protein-coupled receptors, DP₁ and CRTH2/DP₂. CRTH2 primarily couples to G_i or G_q subunits to mobilize Ca²⁺, induce cell migration, and up-regulate adhesion molecules.¹ CRTH2 mRNA has been detected in various tissues including liver, lung, kidney, brain, heart, thymus, and spleen and in various cell lineages including both hematopoietic and non-hematopoietic cell lines.² Human CRTH2 is 395 amino acids in length with an estimated molecular weight of 43 kDa. Cayman's CRTH2/DP₂ receptor (C-Term) polyclonal antibody can be used for Western blot of CRTH2 on samples of human, mouse, and rat origin. It detects both unglycosylated and glycosylated protein at sizes ranging from 35-40 to 50-70 kDa, as reported by Nagata *et al.*, in 1999.³

References

1. Nagata, K. and Hirai, H. The second PGD₂ receptor CRTH2: Structure, properties, and functions in leukocytes. *Prostaglandins Leukot. Essent. Fatty Acids* **69**, 169-177 (2003).
2. Abe, H., Takeshita, T., Nagata, K., *et al.* Molecular cloning, chromosome mapping and characterization of the mouse CRTH2 gene, a putative member of the leukocyte chemoattractant receptor family. *Gene* **227**, 71-77 (1999).
3. Nagata, K., Tanaka, K., Ogawa, K., *et al.* Selective expression of a novel surface molecule by human Th2 cells *in vivo*. *J. Immunol.* **162**, 1278-1286 (1999).

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA
This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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