

# PRODUCT INFORMATION



## CRTH2/DP<sub>2</sub> Receptor (N-Term) Polyclonal Antibody

Item No. 10004886

### Overview and Properties

<b>Contents:</b>	This vial contains 500 µl peptide-affinity purified polyclonal antibody.
<b>Synonyms:</b>	Chemoattractant-receptor Homologous Molecule Expressed on Th2 Cells, DP <sub>2</sub> Receptor, GPR44, Prostaglandin D <sub>2</sub> Receptor 2
<b>Immunogen:</b>	CRTH2/DP <sub>2</sub> protein amino acids 2-21
<b>Cross Reactivity:</b>	(+) Human, mouse, and rat DP <sub>2</sub> receptor; other species not tested.
<b>Form:</b>	Liquid
<b>Storage:</b>	-20°C (as supplied)
<b>Stability:</b>	≥3 years
<b>Storage Buffer:</b>	PBS, pH 7.2, with 50% glycerol and 0.02% sodium azide
<b>Host:</b>	Rabbit
<b>Applications:</b>	Western blot (WB); the recommended starting dilution for WB is 1:200. Other applications were not tested, therefore optimal working concentration/dilution should be determined empirically.

### Description

Prostaglandin D<sub>2</sub> (PGD<sub>2</sub>) elicits its biological function through interaction with two distinct G protein-coupled receptors, DP<sub>1</sub> and CRTH2/DP<sub>2</sub>. CRTH2 primarily couples to G<sub>i</sub> or G<sub>q</sub> subunits to mobilize Ca<sup>2+</sup>, induce cell migration, and up-regulate adhesion molecules.<sup>1</sup> 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.<sup>2</sup> Human CRTH2 is 395 amino acids in length with an estimated molecular weight of 43 kDa. Cayman's CRTH2/DP<sub>2</sub> receptor (N-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.<sup>3</sup>

### References

1. Nagata, K. and Hirai, H. The second PGD<sub>2</sub> 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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CAYMAN CHEMICAL  
1180 EAST ELLSWORTH RD  
ANN ARBOR, MI 48108 · USA  
PHONE: [800] 364-9897  
[734] 971-3335  
FAX: [734] 971-3640  
CUSTSERV@CAYMANCHEM.COM  
WWW.CAYMANCHEM.COM