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HRH4/GPCR105 Rabbit pAb

Catalog # AP97186

Product Information

Application	IHC-P, IHC-F, IF
Primary Accession	Q9H3N8
Other Accession	Q9H3N8
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Calculated MW	44496
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human HRH4/GPCR105
Epitope Specificity	285-390/390
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Belongs to the G-protein coupled receptor 1 family.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	Histamine is a ubiquitous messenger molecule released from mast cells, enterochromaffin-like cells, and neurons. Its various actions are mediated by a family of histamine receptors, which are a subset of the G-protein coupled receptor superfamily. This gene encodes a histamine receptor that is predominantly expressed in haematopoietic cells. The protein is thought to play a role in inflammation and allergy reponses. Multiple transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, May 2009]

Additional Information

Gene ID	59340
Other Names	AXOR35; BG26; GPCR105; GPRv53; H4; H4R; HH4R; HRH4_HUMAN; HRH4; G-protein coupled receptor 105; Pfi-013; SP9144; HRH4_MOUSE; HRH4_RAT; histamine receptor H4
Dilution	IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

Protein Information

Name	HRH4
Synonyms	GPCR105
Function	G protein-coupled receptor primarily expressed in immune cells such as mast cells, eosinophils, basophils, dendritic cells and neutrophils that plays a key role in immune and inflammatory responses (PubMed:26948974). Mediates chemotaxis of immune cells to sites of inflammation or injury by responding to histamine (PubMed:26948974). Activation by histamine also influences the release of proinflammatory cytokines such as TNF, CCL4, IL6 and IFN-gamma (PubMed:29600327, PubMed:31583075). Ligand binding induces a conformation change that triggers signaling via G(i)/GNAI1 leading to decreased intracellular cAMP levels by inhibiting adenylate cyclase activity (PubMed:39333117). In addition, plays a role in the control of renal reabsorption processes, particularly albumin uptake (By similarity).
Cellular Location	Cell membrane; Multi-pass membrane protein
Tissue Location	Expressed primarily in the bone marrow and eosinophils. Shows preferential distribution in cells of immunological relevance such as T-cells, dendritic cells, monocytes, mast cells, neutrophils and basophils (PubMed:12503632, PubMed:26948974, PubMed:29600327). Also expressed in a wide variety of peripheral tissues, including the heart, kidney, liver, lung, pancreas, skeletal muscle, prostate, small intestine, spleen, testis, colon, fetal liver and lymph node.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.