

Product datasheet for **TA328667**

HRH4 Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	FC, WB
Recommended Dilution:	WB: 1:200-1:2000; IHC: 1:100-1:3,000; FC: 1:50-1:600
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Immunogen:	Peptide HTLFEWDFGKEIC, corresponding to amino acids 75-87 of human H4 Histamine Receptor. 1st extracellular loop.
Formulation:	Lyophilized. Concentration before lyophilization ~0.8mg/ml (lot dependent, please refer to CoA along with shipment for actual concentration). Buffer before lyophilization: Phosphate buffered saline (PBS), pH 7.4, 1% BSA, 0.025% NaN ₃ .
Reconstitution Method:	Add 50 ul double distilled water (DDW) to the lyophilized powder.
Purification:	Affinity purified on immobilized antigen.
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Gene Name:	histamine receptor H4
Database Link:	NP_067637 Entrez Gene 59340 Human Q9H3N8



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Background:

Histamine (2-[4-imidazole]ethylamine) is a low-molecular-weight amine synthesized from L-histidine. It is produced by various cells throughout the body, including central nervous system neurons, gastric mucosa parietal cells, mast cells, basophils and lymphocytes. Histamine is a major biological mediator whose functions include, among many others, regulation of vascular smooth muscle, immune regulation, regulation of sleep-wake cycles and regulation of gastric acid secretion. The biological effects of histamine are mediated through four receptors (H1- H4 Histamine receptors) all of which belong to the 7-transmembrane domain, G protein-coupled receptor (GPCR) superfamily. H4 Histamine Receptor couples to Gi/G0 proteins and receptor activation leads to inhibition of adenylate cyclase, mobilisation of calcium from intracellular stores and activation of the mitogen-activated protein kinase (MAPK) cascade. H4 Histamine Receptor is largely expressed in haemopoietic cells including mast cells, eosinophils, dendritic cells and T lymphocytes. H4 Histamine Receptors modulate eosinophil migration and the selective recruitment of mast cells leading to amplification of histamine-mediated immune responses. In addition, H4 Histamine Receptors are involved in dendritic cell activation and the regulation of T lymphocyte cytokine production. These studies indicate that H4 Histamine Receptor is an attractive therapeutic target for the treatment of inflammatory disorders, such as allergy, asthma, chronic pruritus and autoimmune diseases.

Synonyms:

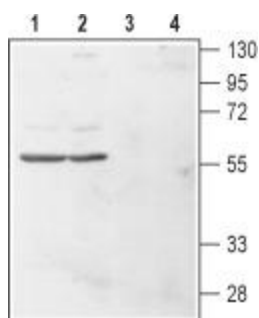
AXOR35; BG26; GPCR105; GPRv53; H4; H4R; HH4R

Protein Families:

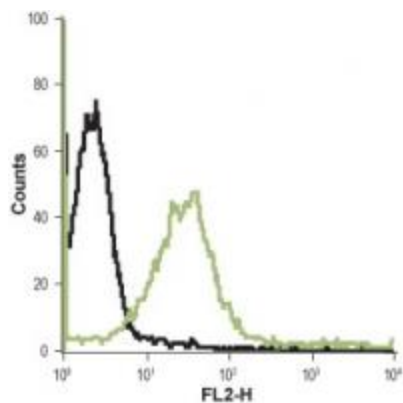
Druggable Genome, GPCR, Transmembrane

Protein Pathways:

Neuroactive ligand-receptor interaction

Product images:

Western blot analysis of human chronic myelogenous leukemia (K562) (lanes 1 and 3) and human promyelocytic leukemia (HL-60) (lanes 2 and 4) cell lysates: 1, 2. Anti-Human H4 Histamine Receptor (extracellular) antibody, (1:400). 3, 4. Anti-Human H4 Histamine Receptor (extracellular) antibody, preincubated with the control peptide antigen.



Indirect flow cytometry analysis of H4 Histamine Receptor expression in live intact Jurkat (acute T-cell leukemia) cell lines. black line, Unstained cells + goat-anti-rabbit-PE. green line, Cells+ Anti-Human H4 Histamine Receptor (extracellular) antibody, (1:20) + goat-anti-rabbit-PE.