

## 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 <sub>3</sub> .
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:	<a href="#">NP_067637</a> <a href="#">Entrez Gene 59340 Human</a> <a href="#">Q9H3N8</a>

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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:**

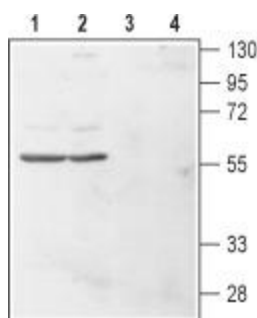
AXOR35; BG26; GPCR105; GPRv53; H4; H4R; HH4R

**Protein Families:**

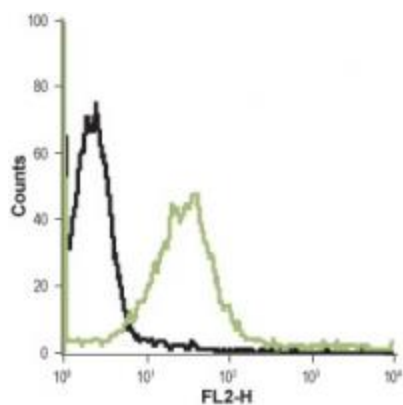
Druggable Genome, GPCR, Transmembrane

**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.