

Product datasheet for **TA328864**

Hrh2 Rabbit Polyclonal Antibody

Product data:

| | |
|------------------------|--|
| Product Type: | Primary Antibodies |
| Applications: | FC, IHC, WB |
| Recommended Dilution: | WB: 1:200-1:2000; IHC: 1:100-1:3,000; FC: 1:50-1:600 |
| Reactivity: | Mouse, Rat |
| Host: | Rabbit |
| Clonality: | Polyclonal |
| Immunogen: | Peptide RNGTRGGNDTFKC, corresponding to amino acids 161-173 of rat H2 Histamine Receptor. 2nd 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 H 2 |
| Database Link: | NP_037097 Entrez Gene 15466 Mouse Entrez Gene 25461 Rat P25102 |



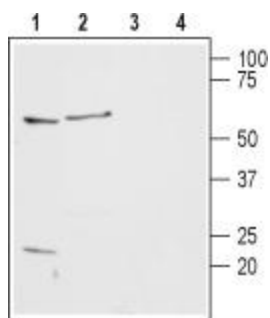
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Background:

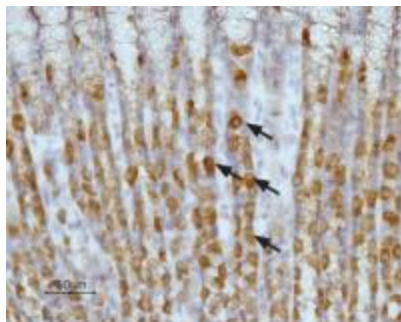
Histamine (2-[4-imidazole]ethylamine) is a low-molecular-weight amine synthesized from L-histidine. It is produced by various cells throughout the body, including central nervous system neurons, gastric mucosa parietal cells, mast cells, basophils and lymphocytes. Histamine is a major biological mediator 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. H2 receptors couple to adenylate cyclase via Gs, leading to the formation of cAMP and the activation of protein kinase A (PKA). H2 receptors are expressed in several tissues including brain, gastrointestinal tract and heart. The most studied physiological role of the H2 receptors is their involvement in the regulation of gastric acid secretion. Specific H2 receptor antagonists are currently used for the treatment of acid-related gastrointestinal conditions such as peptic ulcer, gastroesophageal reflux disease and dyspepsia. Involvement of H2 receptors in chronic heart failure and immune regulation has also been suggested.

Synonyms:

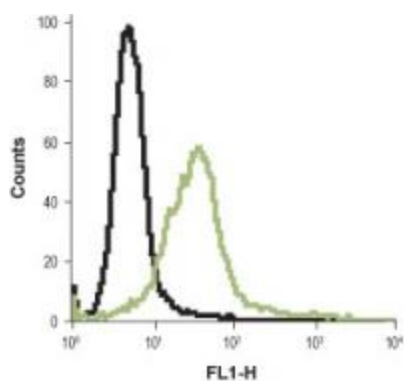
DBP1; DDX15; DHX15; H2R; OTTHUMP00000161242

Product images:

Western blot analysis of rat basophilic leukemia cells (RBL) (lanes 1 and 3) and rat brain lysates (lanes 2 and 4): 1, 2. Anti-Rat H2 Histamine Receptor (extracellular) antibody, (1:200). 3, 4. Anti-Rat H2 Histamine Receptor (extracellular) antibody, preincubated with the control peptide antigen.



Expression of H2 Histamine Receptor in rat stomach. Immunohistochemical staining of paraffin embedded section of rat stomach using Anti-Rat H2 Histamine Receptor (extracellular) antibody, (1:100). H2R (brown staining) is expressed in parietal cells (arrows) of the gastric glands. Hematoxylin is used as the counterstain.



Indirect flow cytometry analysis in live intact RBL (rat basophilic leukemia) cell lines: black line, Unstained cells + goat-anti-rabbit-FITC. green line, Cells+ Anti-Rat H2 Histamine Receptor (extracellular) antibody, (1:20) + goat-anti-rabbit-FITC.