10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

HRH2 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP14970c

Product Information

Application	WB, E
Primary Accession	P25021
Other Accession	NP_071640.1
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB34939
Calculated MW	40098
Antigen Region	189-218

Additional Information

Gene ID	3274
Other Names	Histamine H2 receptor, H2R, HH2R, Gastric receptor I, HRH2
Target/Specificity	This HRH2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 189-218 amino acids from the Central region of human HRH2.
Dilution	WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	HRH2 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	HRH2
Function	G-protein coupled receptor for histamine, primarily mediating gastric acid secretion. Predominantly expressed in the gastric mucosa, couples to G(s) G alpha proteins upon histamine binding, leading to activation of adenylate cyclase and increased intracellular cyclic AMP (cAMP) levels

(PubMed:38647423, PubMed:39333117). This signaling cascade stimulates parietal cells to secrete hydrochloric acid, playing a key role in digestive physiology. Also expressed in other tissues, including the heart and central nervous system, where it may contribute to cardiac stimulation and modulate neurotransmitter release (By similarity).

Cellular Location Cell membrane; Multi-pass membrane protein.

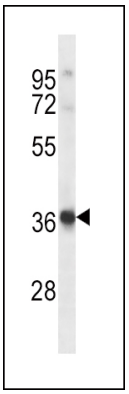
Background

Histamine is a ubiquitous messenger molecule released from mast cells, enterochromaffin-like cells, and neurons. Its various actions are mediated by histamine receptors H1, H2, H3 and H4. Histamine receptor H2 belongs to the family 1 of G protein-coupled receptors. It is an integral membrane protein and stimulates gastric acid secretion. It also regulates gastrointestinal motility and intestinal secretion and is thought to be involved in regulating cell growth and differentiation. Alternatively spliced transcript variants encoding different isoforms have been found for this gene.

References

Bailey, S.D., et al. Diabetes Care 33(10):2250-2253(2010) Ruano, G., et al. Pharmacogenomics 11(7):959-971(2010) Davila, S., et al. Genes Immun. 11(3):232-238(2010) Szukiewicz, D., et al. Inflamm. Res. 59 SUPPL 2, S205-S207 (2010) : Talmud, P.J., et al. Am. J. Hum. Genet. 85(5):628-642(2009)

Images



HRH2 Antibody (Center) (Cat. #AP14970c) western blot analysis in Uterus tissue lysates (35ug/lane).This demonstrates the HRH2 antibody detected the HRH2 protein (arrow).

Citations

- Histamine deficiency aggravates cardiac injury through miR-206/216b-Atg13 axis-mediated autophagic-dependant apoptosis.