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Histamine H2 Receptor Polyclonal Antibody

Catalog # AP70324

Product Information

Application	WB, IF, ICC, E
Primary Accession	P25021
Reactivity	Human, Rat, Mouse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	40098

Additional Information

Gene ID	3274
Other Names	HRH2; Histamine H2 receptor; H2R; HH2R; Gastric receptor I
Dilution	WB~~Western Blot: 1/500 - 1/2000. Immunofluorescence: 1/200 - 1/1000. ELISA: 1/5000. Not yet tested in other applications. IF~~1:50~200 ICC~~N/A E~~N/A
Format	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.
Storage Conditions	-20℃

Protein Information

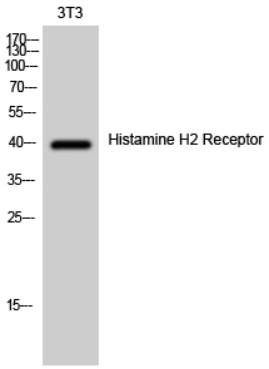
Name	HRH2
Function	G-protein coupled receptor for histamine, primarily mediating gastric acid secretion. Predominantly expressed in the gastric mucosa, couples to G(s) G alpha proteins upon histamine binding, leading to activation of adenylate cyclase and increased intracellular cyclic AMP (cAMP) levels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

The H2 subclass of histamine receptors mediates gastric acid secretion. Also appears to regulate gastrointestinal motility and intestinal secretion. Possible role in regulating cell growth and differentiation.

The activity of this receptor is mediated by G proteins which activate adenylyl cyclase and, through a separate G protein-dependent mechanism, the phosphoinositide/protein kinase (PKC) signaling pathway (By similarity).

Images



Western Blot analysis of 3T3 cells using Histamine H2 Receptor Polyclonal Antibody