Product Name: **Histamine H4 Receptor Rabbit Polyclonal Antibody**
Catalog #: **APRab12044**
For research use only.

Summary

Description	Rabbit polyclonal Antibody
Host	Rabbit
Application	WB,ICC/IF,ELISA
Reactivity	Human,Rat,Mouse
Conjugation	Unconjugated
Modification	Unmodified
Isotype	IgG
Clonality	Polyclonal
Form	Liquid
Concentration	1mg/ml
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Liquid in PBS containing 50% glycerol, 0.5% protective protein and 0.02% New type preservative N.
Purification	Affinity purification

Application

Dilution Ratio	WB 1:500-1:2000,ICC/IF 1:200-1:1000,ELISA 1:5000-1:10000
Molecular Weight	45kDa

Antigen Information

Gene Name	HRH4
Alternative Names	HRH4; GPCR105; Histamine H4 receptor; H4R; HH4R; AXOR35; G-protein coupled receptor 105; GPRv53; Pfi-013; SP9144
Gene ID	59340.0
SwissProt ID	Q9H3N8
Immunogen	The antiserum was produced against synthesized peptide derived from human HRH4. AA range:221-270

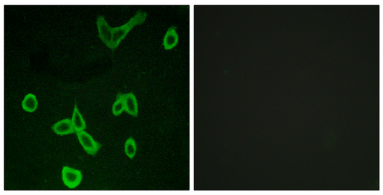
Background

Histamine is a ubiquitous messenger molecule released from mast cells, enterochromaffin-like cells, and neurons. Its various actions are mediated by a family of histamine receptors, which are a subset of the G-protein coupled receptor superfamily. This gene encodes a histamine receptor that is predominantly expressed in haematopoietic cells. The protein is thought to play a role in inflammation and allergy reponses. Multiple transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, May 2009],function:The H4 subclass of histamine receptors could mediate the histamine signals in peripheral tissues. Displays a significant level of constitutive activity (spontaneous activity in the absence of agonist).,induction:Expression is either up-regulated or down-regulated upon activation of the lymphoid tissues and this regulation may depend on the presence of IL-10 or IL-13.,miscellaneous:Does not bind diphenhydramine, loratadine, ranitidine, cimetidine and chlorpheniramine. Shows modest affinity for dimaprit, impromidine, clobenpropit, thioperamide, burimamide clozapine, immepip and imetit. The order of inhibitory activity was imetit > clobenpropit > burimamide > thioperamide. Clobenpropit behaves as a partial agonist, dimaprit and impromidine show some agonist activity while clozapine behaves as a full agonist. Thioperamide shows inverse agonism (enhances cAMP activity). The order of inhibitory activity of histamine derivatives was Histamine > N-alpha-methylhistamine > R(-)-alpha-methylhistamine > S(+)-alpha-methylhistamine. Both N-alpha-methylhistamine > R(-)-alpha-methylhistamine behave as full agonists.,similarity:Belongs to the G-protein coupled receptor 1 family.,tissue specificity:Expressed primarily in the bone marrow and eosinophils. Shows preferential distribution in cells of immunological relevance such as T-cells, dendritic cells, monocytes, mast cells, neutrophils. Also expressed in a wide variety of peripheral tissues, including the heart, kidney, liver, lung, pancreas, skeletal muscle, prostate, small intestine, spleen, testis, colon, fetal liver and lymph node.,

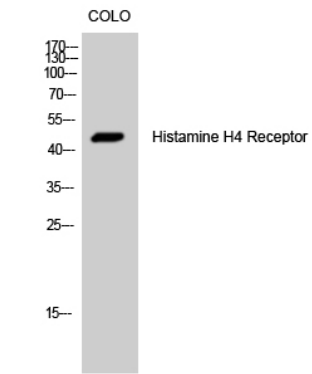
Research Area

Neuroactive ligand-receptor interaction;

Image Data



Immunofluorescence analysis of LOVO cells, using HRH4 Antibody. The picture on the right is blocked with the synthesized peptide.



Western Blot analysis of COLO cells using Histamine H4 Receptor Polyclonal Antibody