

Product name:	Histamine H4 Receptor Rabbit Polyclonal Antibody
Cat number:	ABN12044
Conjugate:	Unconjugated
Size:	100µL
Clone:	Polyclonal
Concentration:	1mg/ml
Host:	Rabbit
Isotype:	IgG
Immunogen:	The antiserum was produced against synthesized peptide derived from human HRH4. AA range:221-270
Reactivity:	Human,Rat,Mouse
Applications:	WB 1:500-1:2000,ICC/IF 1:200-1:1000,ELISA 1:5000-1:10000
Molecular Weight:	45kDa
Purification:	Affinity purification
Form:	Liquid
Buffer:	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
Storage:	Store at 4°C short term. Aliquot and store at -20°C for 12 months. Avoid freeze/thaw cycles.

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 responses. 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, imipemip 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.,