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HRH3 Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP1700b

Specification

HRH3 Antibody (C-term) - Product Information

Application	**WB, IHC-P,E**
Primary Accession	Q9Y5N1
Reactivity	**Human**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit Ig**
Calculated MW	**48671**
Antigen Region	**414-442**

HRH3 Antibody (C-term) - Additional Information

Gene ID 11255

Other Names
Histamine H3 receptor, H3R, HH3R, G-protein coupled receptor 97, HRH3, GPCR97

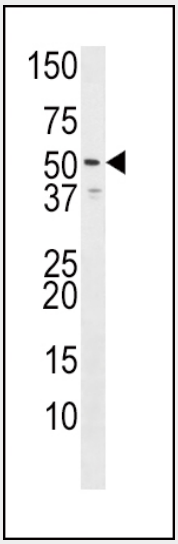
Target/Specificity
This HRH3 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 414-442 amino acids from the C-terminal region of human HRH3.

Dilution
WB~~1:1000
IHC-P~~1:10~50

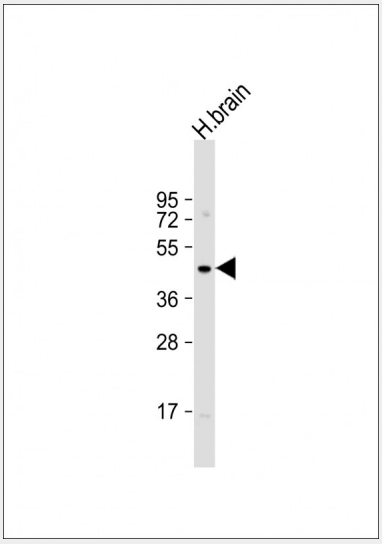
Format
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

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
HRH3 Antibody (C-term) is for research use only and not for use in diagnostic or



Western blot analysis of anti-HH3R Pab (Rabbit ID 1071) in Jurkat cell line lysate (35ug/lane). HH3R(arrow) was detected using the purified Pab. This western blot identifies isoform two of HRH3. The accession number of HRH3 is CAC39434; Q9Y5N1.



Anti-HRH3 Antibody (C-term) at 1:1000 dilution + human brain lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution.

therapeutic procedures.

HRH3 Antibody (C-term) - Protein Information

Name HRH3

Synonyms GPCR97

Function
The H3 subclass of histamine receptors could mediate the histamine signals in CNS and peripheral nervous system. Signals through the inhibition of adenylate cyclase and displays high constitutive activity (spontaneous activity in the absence of agonist). Agonist stimulation of isoform 3 neither modified adenylate cyclase activity nor induced intracellular calcium mobilization.

Cellular Location
Cell membrane; Multi-pass membrane protein.

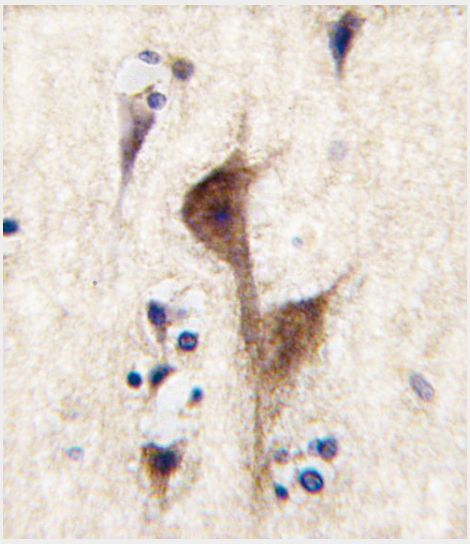
Tissue Location
Expressed predominantly in the CNS, with the greatest expression in the thalamus and caudate nucleus. The various isoforms are mainly coexpressed in brain, but their relative expression level varies in a region-specific manner. Isoform 3 and isoform 7 are highly expressed in the thalamus, caudate nucleus and cerebellum while isoform 5 and isoform 6 show a poor expression. Isoform 5 and isoform 6 show a high expression in the amygdala, substantia nigra, cerebral cortex and hypothalamus. Isoform 7 is not found in hypothalamus or substantia nigra

HRH3 Antibody (C-term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Predicted band size : 49 kDa
Blocking/Dilution buffer: 5% NFDM/TBST.



Formalin-fixed and paraffin-embedded human brain tissue reacted with HRH3 antibody (C-term), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.

HRH3 Antibody (C-term) - Background

The histamine receptor H3 (HRH3) is a presynaptic autoreceptor on histamine neurons in the brain and a presynaptic heteroreceptor in nonhistamine-containing neurons in both the central and peripheral nervous systems. The deduced 445-amino acid HRH3 protein contains 7 predicted transmembrane domains. HRH3 has significant sequence homology to members of the biogenic amine subfamily of GPCRs. Most notable is an aspartic acid residue in the predicted third transmembrane domain, which is a hallmark of the biogenic amine receptor subfamily; this residue is the putative binding site for the primary amine. HRH3 shares 22% and 21.4% amino acid sequence homology with the H1 and H2 receptors, respectively. Expression of recombinant HRH3 in a variety of cell lines conferred an ability to inhibit adenylate cyclase in response to histamine, but not to acetylcholine or any other biogenic amine. Northern blot analysis of human tissues showed HRH3 expression only in the brain, with highest expression in the thalamus and caudate nucleus. Whereas

Northern blot analysis did not detect HRH3 expression in any peripheral tissue examined, RT-PCR showed expression in human small intestine, testis, and prostate. In situ hybridization of rat brain sections showed that Hrh3 is abundantly expressed in brain. Hrh3 was most notably observed throughout the thalamus, the ventromedial hypothalamus, and the caudate nucleus. Strong expression was also seen in layers II, V, and VIb of the cerebral cortex, in the pyramidal layers of the hippocampus, and in olfactory tubercle. In addition, Hrh3 expression was found in the locus ceruleus and in the histaminergic cell bodies in the tuberomammillary nuclei.