

Product datasheet for **AP11651PU-N**

HRH3 (C-term) Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	IHC, WB
Recommended Dilution:	Western blot: 1:1000. Immunohistochemistry on formalin-fixed, paraffin-embedded sections: 1:10 - 1:50.
Reactivity:	Human
Host:	Rabbit
Isotype:	Ig
Clonality:	Polyclonal
Immunogen:	This antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between aa 414 - 442 from the C-terminal region of human HRH3.
Specificity:	This antibody detects HRH3 at C-term.
Formulation:	PBS with 0.09% (W/V) sodium azide State: Purified State: Liquid Ig fraction
Concentration:	lot specific
Purification:	Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.
Conjugation:	Unconjugated
Storage:	Store undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
Gene Name:	histamine receptor H3
Database Link:	Entrez Gene 11255 Human Q9Y5N1



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Background:

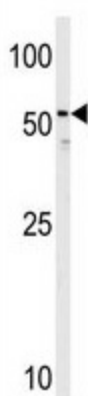
The histamine receptor H3 (HRH3) is a presynaptic autoreceptor on histamine neurons in the brain and a presynaptic heteroreceptor in nonhistamine-containing neurons in both the central and peripheral nervous systems. The deduced 445-amino acid HRH3 protein contains 7 predicted transmembrane domains. 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.

Synonyms:

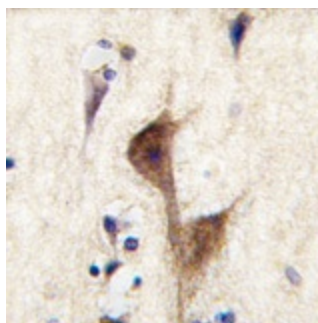
HH3R, GPCR97, G-protein coupled receptor 97

Note:

Molecular weight 49830 Da

Product images:

Western blot analysis of anti-HH3R in Jurkat cell line lysate (35 ug/lane). HH3R (arrow) was detected using the purified Pab (1:60 dilution). This western blot identifies isoform two of HRH3.



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.