

Anti-HRH3 Antibody
Catalog # ABO10589**Specification**

Anti-HRH3 Antibody - Product Information

Application	WB
Primary Accession	Q9Y5N1
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized

Description

Rabbit IgG polyclonal antibody for Histamine H3 receptor(HRH3) detection. Tested with WB in Human;Mouse;Rat.

Reconstitution

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-HRH3 Antibody - Additional Information

Gene ID 11255

Other Names

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

Calculated MW

48671 MW KDa

Application Details

Western blot, 0.1-0.5 µg/ml, Human, Rat, Mouse

Subcellular Localization

Cell membrane; Multi-pass membrane protein.

Tissue Specificity

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.

Protein Name

Histamine H3 receptor(H3R/HH3R)

Contents

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na₂HPO₄, 0.05mg Thimerosal, 0.05mg NaN₃.

Immunogen

A synthetic peptide corresponding to a sequence at the C-terminus of human HRH3(428-445aa CPQKLKIQPHSSLEHCWK), different from the related rat sequence by three amino acids.

Purification

Immunogen affinity purified.

Cross Reactivity

No cross reactivity with other proteins

Storage

At -20°C for one year. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for a longer time. Avoid repeated freezing and thawing.

Anti-HRH3 Antibody - 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.

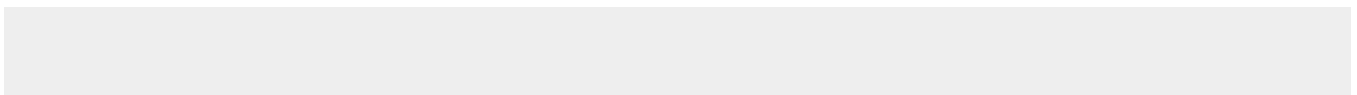
Tissue Location

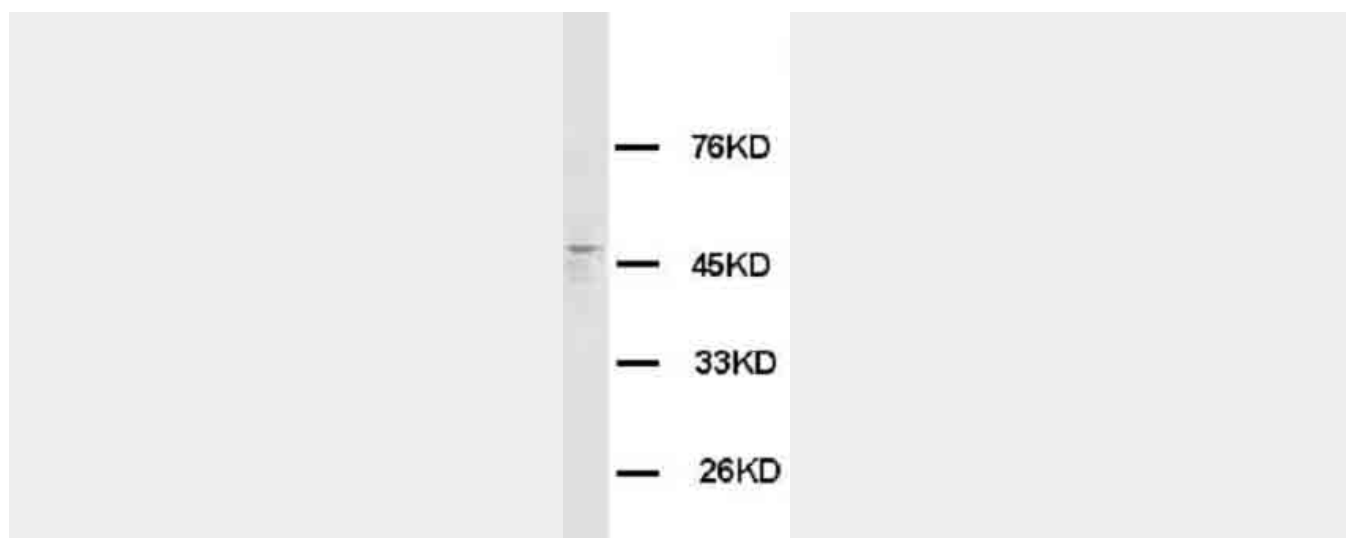
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Anti-HRH3 Antibody - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Anti-HRH3 Antibody - Images



Anti-HRH3 antibody, ABO10589, Western blottingWB: Rat Brain Tissue Lysate

Anti-HRH3 Antibody - 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. And it shares 22% and 21.4% amino acid sequence homology with the H1(HRH1) and H2(HRH2) receptors, respectively. The 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. Additionally, 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.