

Polyclonal Anti-HRH3 Antibody

Catalog Number: PA1204

Description

Gene Name	histamine receptor H3
Recommended Protein Name	Histamine H3 receptor
Lot No.	0121212020427
Size	100µg/vial
Form	lyophilized
Ig type	Rabbit IgG
Specificity	No cross reactivity with other proteins.
Purification	Immunogen affinity purified.
Species	Reacts with: human, rat Predicted to work with: mouse
Immunogen	A synthetic peptide corresponding to a sequence at the C-terminus of human HRH3(428-445aa CPQKLIKPHSSLEHCWK), different from the related rat sequence by three amino acids.
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na ₂ HPO ₄ , 0.05mg Thimerosal, 0.05mg NaN ₃ .

Application

	Concentration	Tested Species	Predicted Species	Antigen Retrieval
Western blot	0.1-0.5µg/ml	Hu, Rat	Ms	-

Tested Species: In-house tested species with positive results.

Predicted Species: Species predicted to be fit for the product based on sequence similarities.

Other applications have not been tested.

Optimal dilutions should be determined by end users.

Preparation and storage

Reconstitution: 0.2ml of distilled water will yield a concentration of 500µg/ml.

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.

Relevant detection systems

Boster provides a series of assays reacted with primary antibodies. Antibody can be supported by chemiluminescence kit EK1002 in WB.

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 systems¹. 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.

Reference

1. Hill, S. J.; Ganellin, C. R.; Timmerman, H.; Schwartz, J. C.; Shankley, N. P.; Young, J. M.; Schunack, W.; Levi, R.; Haas, H. L. : International Union of Pharmacology. XIII. Classification of histamine receptors. *Pharm. Rev.* 49: 253-278, 1997.