Anti-HRH3 Antibody

Alternative Names: HH3R, G-protein coupled receptor 97, GPCR97, H3R, Histamine H3 receptor

Catalogue Number: AB21-10137-100ug

Size: 100ug

Background Information

Histamine is an important messenger molecule and neuromodulator with four known G protein-coupled receptors (GPCRs), H1, H2, H3 and H4. Histamine receptor H3 (HRH3) is a presynaptic autoreceptor that regulates histamine release from histaminergic neurons via negative feedback [1] as well as a heteroreceptor that regulates the release of other neurotransmitters [2,3,4]. It is also expressed postsynaptically in the modulation of dopamine signalling.

HRH3 is expressed predominantly in the cortex, thalamus, hypothalamus, hippocampus, amygdala and basal ganglia. Dysregulated central histaminergic signalling has been associated with a number of psychiatric disorders including sleep disorders, ADHD, Alzheimer's disease, Parkinson's disease and schizophrenia.

Product Information

Antibody Type:	Polyclonal Antibody	**Host:**	Rabbit
Isotype:	IgG	**Species Reactivity:**	Human, Mouse, Rat

Immunogen: A synthetic peptide from the C-terminal region of human HRH3

Format: 100 µg in 100 µl Buffer: PBS with 0.03% Proclin300, 50% glycerol, pH7.3.

Storage Conditions: Store at -20˚C. Avoid freeze / thaw cycles.

Applications: WB 1:2000-5000. IHC 1:10-100.

Additional Information

Subcellular location:	Plasma Membrane	**MW:**	49kDa (Intended as a general guide and does not allow for all isoforms and species variations)
Gene ID	11255	**Uniprot ID:**	Q9Y5N1

References

[1] Morisset S, Rouleau A, Ligneau X, Gbahou F, Tardivel-Lacombe J, Stark H, Schunack W, Ganellin CR, Schwartz JC, Arrang JM. High constitutive activity of native H3 receptors regulates histamine neurons in brain. Nature. 2000; 408:860-4.

[2] Schlicker E, Betz R, Gothert M. Histamine H3 receptor-mediated inhibition of serotonin release in the rat brain cortex. Naunyn Schmiedebergs Arch Pharmacol. 1988; 337:588-90.

[3] Schlicker E, Fink K, Hinterthaner M, Gothert M. Inhibition of noradrenaline release in the rat brain cortex via presynaptic H3 receptors. Naunyn Schmiedebergs Arch Pharmacol. 1989; 340:633-8.

[4] Schlicker E, Fink K, Detzner M, Gothert M. Histamine inhibits dopamine release in the mouse striatum via presynaptic H3 receptors. J Neural Transm Gen Sect. 1993; 93:1-10.

Images

IHC of HRH3 in Rat brain
HRH3: Cat No: AB21-10137
Antibody dilution: 1:30