

# Immunotag™ Histamine H3 Receptor Polyclonal Antibody

| Antibody Specification |                                                                                                                                                                    |
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| Catalog No.            | ITT2142                                                                                                                                                            |
| Product Description    | Immunotag™ Histamine H3 Receptor Polyclonal Antibody                                                                                                               |
| Size                   | 50 µg, 100 µg                                                                                                                                                      |
| Conjugation            | HRP, Biotin, FITC, Alexa Fluor® 350, Alexa Fluor® 405, Alexa Fluor® 488, Alexa Fluor® 555, Alexa Fluor® 594, Alexa Fluor® 647                                      |
| IMPORTANT NOTE         | This product is custom manufactured with a lead time of 3-4 weeks. Once in production, this item cannot be cancelled from an order and is not eligible for return. |
| Target Protein         | Histamine H3R                                                                                                                                                      |
| Clonality              | Polyclonal                                                                                                                                                         |
| Storage/Stability      | -20°C/1 year                                                                                                                                                       |
| Application            | WB,IHC-p,IF,ELISA                                                                                                                                                  |
| Recommended Dilution   | Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. Immunofluorescence: 1/200 - 1/1000. ELISA: 1/5000. Not yet tested in other applications.        |
| Concentration          | 1 mg/ml                                                                                                                                                            |
| Reactive Species       | Human,Mouse,Rat                                                                                                                                                    |
| Host Species           | Rabbit                                                                                                                                                             |
| Immunogen              | Synthesized peptide derived from Histamine H3 Receptor, at AA range: 260-340                                                                                       |
| Specificity            | Histamine H3 Receptor Polyclonal Antibody detects endogenous levels of Histamine H3 Receptor protein.                                                              |
| Purification           | The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen                                               |
| Form                   | Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.                                                                                            |
| Gene Name              | HRH3                                                                                                                                                               |
| Accession No.          | Q9Y5N1 P58406 Q9QYN8                                                                                                                                               |
| Alternate Names        | HRH3; GPCR97; Histamine H3 receptor; H3R; HH3R; G-protein coupled receptor 97                                                                                      |

## Antibody Specification

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| Description                 | histamine receptor H3(HRH3) Homo sapiens Histamine is a ubiquitous messenger molecule released from mast cells, enterochromaffin-like cells, and neurons. Its various actions are mediated by histamine receptors H1, H2, H3 and H4. This gene encodes one of the histamine receptors (H3) which belongs to the family 1 of G protein-coupled receptors. It is an integral membrane protein and can regulate neurotransmitter release. This receptor can also increase voltage-dependent calcium current in smooth muscles and innervates the blood vessels and the heart in cardiovascular system. [provided by RefSeq, Jul 2008],                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Cell Pathway/<br>Category   | Neuroactive ligand-receptor interaction,                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Protein<br>Expression       | Blood,Hippocampus,Thalamus,                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Subcellular<br>Localization | plasma membrane,integral component of plasma membrane,integral component of membrane,presynapse,                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Protein Function            | Additional isoforms seem to exist,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 niether modified adenylate cyclase activity nor induced intracellular calcium mobilization.,miscellaneous:Does not bind to cimetidine and tripolidine. Shows modest affinity for thioperamide, imetit, N-alpha-methylhistamine and R(-)-alpha-methylhistamine. Isoform 4 is unable to bind to iodoproxyfan while isoforms 1 and 3 bind it with high affinity.,similarity:Belongs to the G-protein coupled receptor 1 family.,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., |
| Usage                       | For Research Use Only! Not for diagnostic or therapeutic procedures.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |