

Histamine H1 Receptor (H-300): sc-20633

BACKGROUND

Histamine is an inflammatory mediator that is ubiquitously expressed and has a broad range of pharmacologic effects. Specifically, it plays a role in the central nervous, gastrointestinal, respiratory and immune systems. The effects of histamine are mediated by a family of G protein-coupled receptors, the Histamine H1, H2, H3 and H4 Receptors. The gene encoding the human Histamine H1 Receptor maps to chromosome 3p25.3 and is expressed in highest abundance in placenta, with lower levels in lung, skeletal muscle, kidney and brain. The murine Histamine H2 Receptor gene maps to chromosome 13 and is highly expressed in stomach with moderate expression in brain and heart. The gene encoding the human Histamine H3 Receptor is located on chromosome 20 and is expressed as six alternative splice variants in thalamus. The human Histamine H4 Receptor gene maps to chromosome 18q11 and is expressed most abundantly in bone marrow and spleen in addition to peripheral blood leukocytes, thymus, small intestine and colon. The histamine receptors respond to several agonists and antagonists, which make them potential therapeutic targets for several diseases, such as asthma, epilepsy and cardiac ischemia.

CHROMOSOMAL LOCATION

Genetic locus: HRH1 (human) mapping to 3p25.3; Hrh1 (mouse) mapping to 6 E3.

SOURCE

Histamine H1 Receptor (H-300) is a rabbit polyclonal antibody raised against amino acids 111-410 mapping near the C-terminus of Histamine H1 Receptor of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

Histamine H1 Receptor (H-300) is recommended for detection of Histamine H1 Receptor of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for Histamine H1 Receptor siRNA (h): sc-35563, Histamine H1 Receptor siRNA (m): sc-35564, Histamine H1 Receptor shRNA Plasmid (h): sc-35563-SH, Histamine H1 Receptor shRNA Plasmid (m): sc-35564-SH, Histamine H1 Receptor shRNA (h) Lentiviral Particles: sc-35563-V and Histamine H1 Receptor shRNA (m) Lentiviral Particles: sc-35564-V.

Molecular Weight of Histamine H1 Receptor: 56 kDa.

Positive Controls: JAR cell lysate: sc-2276.

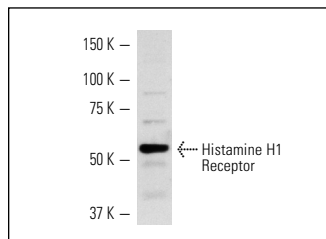
RESEARCH USE

For research use only, not for use in diagnostic procedures.

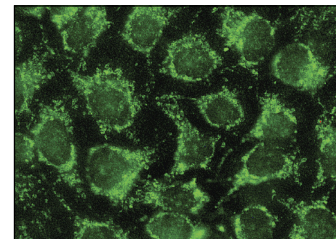
STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

DATA



Histamine H1 Receptor (H-300): sc-20633. Western blot analysis of Histamine H1 Receptor expression in JAR whole cell lysate.



Histamine H1 Receptor (H-300): sc-20633. Immunofluorescence staining of methanol-fixed HeLa cells showing cytoplasmic localization.

SELECT PRODUCT CITATIONS

1. Biswas, P., et al. 2006. PECAM-1 affects GSK-3 β -mediated β -catenin phosphorylation and degradation. *Am. J. Pathol.* 169: 314-324.
2. Triggiani, M., et al. 2007. Differentiation of monocytes into macrophages induces the upregulation of Histamine H1 Receptor. *J. Allergy Clin. Immunol.* 119: 472-481.
3. Botta, L., et al. 2008. Histamine H1 Receptors are expressed in mouse and frog semicircular canal sensory epithelia. *Neuroreport* 19: 425-429.
4. Francis, H., et al. 2008. Small mouse cholangiocytes proliferate in response to H1 histamine receptor stimulation by activation of the IP3/CaMK I/ CREB pathway. *Am. J. Physiol., Cell Physiol.* 295: C499-C513.
5. Bhuiyan, M.E., et al. 2011. Histamine receptor H1 in the nucleus tractus solitarius regulates arterial pressure and heart rate in rats. *Am. J. Physiol. Heart Circ. Physiol.* 301: H523-H529.
6. Seth, R., et al. 2012. Amylin-leptin coadministration stimulates central histaminergic signaling in rats. *Brain Res.* 1442: 15-24.
7. Waki, H., et al. 2013. Transcriptome of the NTS in exercise-trained spontaneously hypertensive rats: implications for NTS function and plasticity in regulating blood pressure. *Physiol. Genomics* 45: 58-67.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.



Try **Histamine H1 Receptor (G-11): sc-374621**, our highly recommended monoclonal alternative to Histamine H1 Receptor (H-300).