HNMT (N-12): sc-107600



The Power to Question

BACKGROUND

Histamine is a biogenic amine that functions as a neurotransmitter in the gut and plays an important role in the immune system, specifically by dilating blood vessels in response to allergic reactions. HNMT (histamine N-methyltransferase), also known as HMT, HNMT-S1 or HNMT-S2, is a 292 amino acid protein that exists as a monomer and belongs to the methyltransferase superfamily. Localized to the cytoplasm, HNMT catalytically inactivates histamine by N-methylation and, via this inactivation, plays an essential role in the degradation of histamine. Through its ability to regulate and reduce the amount of histamine within the cell, HNMT participates in the airway response and limits the severity of allergic reactions. A common genetic polymorphism in HNMT may be linked to a predisposition to asthma. HNMT is expressed as multiple isoforms due to alternative splicing events.

CHROMOSOMAL LOCATION

Genetic locus: HNMT (human) mapping to 2q22.1; Hnmt (mouse) mapping to 2 A3.

SOURCE

HNMT (N-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of HNMT of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-107600 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

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

APPLICATIONS

HNMT (N-12) is recommended for detection of HNMT of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

HNMT (N-12) is also recommended for detection of HNMT in additional species, including equine, bovine and porcine.

Suitable for use as control antibody for HNMT siRNA (h): sc-94838, HNMT siRNA (m): sc-146060, HNMT shRNA Plasmid (h): sc-94838-SH, HNMT shRNA Plasmid (m): sc-146060-SH, HNMT shRNA (h) Lentiviral Particles: sc-94838-V and HNMT shRNA (m) Lentiviral Particles: sc-146060-V.

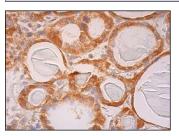
Molecular Weight of HNMT: 33 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941. 3) Immunohistochemistry: use ImmunoCruz™: sc-2053 or ABC: sc-2023 goat IgG Staining Systems.

DATA



HNMT (N-12): sc-107600. Immunoperoxidase staining of formalin fixed, paraffin-embedded human thyroid gland tissue showing cytoplasmic staining of glandular

RESEARCH USE

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

PROTOCOLS

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



Try **HNMT (D-5): sc-374306**, our highly recommended monoclonal alternative to HNMT (N-12).

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