

HDC (M-20): sc-34457

BACKGROUND

Histamine is a multifunctional biogenic amine with relevant roles in intercellular communication, inflammatory processes and highly prevalent pathologies. Specifically, it plays a role in the central nervous, gastrointestinal, respiratory and immune systems. Histamine biogenesis relies on the rate-limiting enzyme histidine decarboxylase (HDC), which is regulated by posttranslational processing.

REFERENCES

1. Fleming, J.V., et al. 2003. The production of 53-55 kDa isoforms is not required for rat L-histidine decarboxylase activity. *J. Biol. Chem.* 278: 686-694.
2. Tanaka, S., et al. 2003. Physiological function mediated by histamine synthesis. *Yakugaku Zasshi* 123: 547-559.
3. Zhao, C.M., et al. 2004. Histamine and histidine decarboxylase are hallmark features of ECL cells but not G cells in rat stomach. *Regul. Pept.* 118: 61-66.
4. Fleming, J.V., et al. 2004. The C-terminus of rat L-histidine decarboxylase specifically inhibits enzymic activity and disrupts pyridoxal phosphate-dependent interactions with L-histidine substrate analogues. *Biochem. J.* 381: 769-778.

CHROMOSOMAL LOCATION

Genetic locus: *Hdc* (mouse) mapping to 2 F1.

SOURCE

HDC (M-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of HDC of mouse origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-34457 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

HDC (M-20) is recommended for detection of HDC of mouse and rat 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).

Suitable for use as control antibody for HDC siRNA (m): sc-45376, HDC shRNA Plasmid (m): sc-45376-SH and HDC shRNA (m) Lentiviral Particles: sc-45376-V.

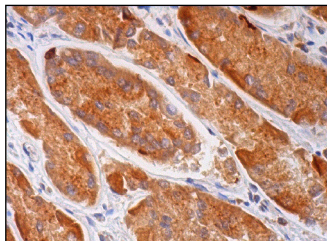
Molecular Weight of HDC: 74 kDa.

Positive Controls: A-10 cell lysate: sc-3806.

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



HDC (M-20): sc-34457. Immunoperoxidase staining of formalin fixed, paraffin-embedded human upper stomach tissue showing cytoplasmic staining of glandular cells.

STORAGE

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

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.