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Schillerstr. 5

EUD2601 Polyclonal Antibody to Histidine decarboxylase - Serum

Alternate names: HDC

Quantity: 100 µl

Background: Histidine decarboxylase(HDC) is the enzyme that calalyses the conversion of histidine

into histamine. It can be found in the histamine secreting ECL cells of some species, as well as in the mast cells. The biogenic amine histamine is an important modulator of numerous physiological processes, including neurotransmission, gastric acid

secretion and smooth muscle tone.

Uniprot ID: P19113

NCBI: NP 002103.2

GeneID: 3067
Host: Rabbit

Immunogen: Recombinant Histidine Decarboxylase produced in *E.coli*.

Format: State: Undiluted Lyophilized Serum
Preservatives: 0.09% Sodium Azide

Reconstitution: Dissolve the antiserum in 50-100 µl distilled water and dilute further

in 0.1M PBS with 1% BSA.

Applications: Immunocytochemistry: 1/1000-1/1500 with overnight incubation at 2-8°C.

Immunohistochemistry on Frozen and Paraffin Embedded Tissues. *Positive Control:* Stefanini-fixed frozen sections of Rat fundus.

Western blot: The antiserum detects the 54 kDa and 73 kDa forms in addition to a 63

kDa form (Rat stomach - See Dartsch et al., 1998).

Other applications not tested. Optimal dilutions are dependent on conditions and

should be determined by the user.

Specificity: This antibody reacts with HDC.

Absorption with 10-100 µg immunogen per ml diluted antiserum abolishes the

staining.

Species Reactivity: Tested: Human, Rat, Mouse, Canine (Dog) and Guinea Pig.

Storage: Store lyophilized at 2-8°C for 6 months or at -20°C long term.

After reconstitution store the antibody undiluted at 2-8°C for one month

or (in aliquots) at -20°C long term. Avoid repeated freezing and thawing. Shelf life: one year from despatch.

Product Citations: Purchased from Acris:

1. McGregor, R;Shan, L;Wu, MF;Siegel, JM. Diurnal fluctuation in the number of hypocretin/orexin and histamine producing: Implication for understanding and treating neuronal loss. PLoS ONE, e0178573, 12, 6,. PubMed PMID: 28570646.



General Readings:

- 1. Dartsch C, Sundler F, Persson L. Antisera against rat recombinant histidine decarboxylase: immunocytochemical studies in different species. Histochem J. 1999 Aug;31(8):507-14. PubMed PMID: 10507457.
- 2. Dartsch C, Chen D, Håkanson R, Persson L. Histidine decarboxylase in rat stomach ECL cells: relationship between enzyme activity and different molecular forms. Regul Pept. 1999 May 31;81(1-3):41-8. PubMed PMID: 10395406.
- 3. Dartsch C, Chen D, Persson L. Multiple forms of rat stomach histidine decarboxylase may reflect posttranslational activation of the enzyme. Regul Pept. 1998 Oct 16;77(1-3):33-41. PubMed PMID: 9809794.
- 4. Dartsch C, Persson L. Recombinant expression of rat histidine decarboxylase: generation of antibodies useful for western blot analysis. Int J Biochem Cell Biol. 1998 Jul;30(7):773-82. PubMed PMID: 9722982.
- 5. Lindström E, Björkqvist M, Boketoft A, Chen D, Zhao CM, Kimura K, et al. Neurohormonal regulation of histamine and pancreastatin secretion from isolated rat stomach ECL cells. Regul Pept. 1997 Aug 15;71(2):73-86. PubMed PMID: 9416989.
- 6. Zhao CM, Jacobsson G, Chen D, Hâkanson R, Meister B. Exocytotic proteins in enterochromaffin-like (ECL) cells of the rat stomach. Cell Tissue Res. 1997 Dec;290(3):539-51. PubMed PMID: 9369530.