Datasheet for ABIN7599827

anti-HDC antibody (AA 12-662)

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Overview

Quantity:	100 µg
Target:	HDC
Binding Specificity:	AA 12-662
Reactivity:	Human, Mouse
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This HDC antibody is un-conjugated
Application:	Western Blotting (WB), Immunohistochemistry (IHC), ELISA

Product Details

Purpose:	Anti-Histidine decarboxylase/HDC Antibody Picoband®
Immunogen:	E.coli-derived human Histidine decarboxylase/HDC recombinant protein (Position: R12-V662).
Isotype:	IgG
Cross-Reactivity (Details):	No cross-reactivity with other proteins.
Characteristics:	Anti-Histidine decarboxylase/HDC Antibody Picoband® (ABIN7599827). Tested in ELISA, IHC, WB applications. This antibody reacts with Human, Mouse. The brand Picoband indicates this is a premium antibody that guarantees superior quality, high affinity, and strong signals with minimal background in Western blot applications. Only our best-performing antibodies are designated as Picoband, ensuring unmatched performance.
Purification:	Immunogen affinity purified.

Target Details

Target:	HDC
Alternative Name:	HDC (HDC Products)
Background:	Synonyms: Neuromodulin, Axonal membrane protein GAP-43, Growth-associated protein 43, Neural phosphoprotein B-50, pp46, GAP43 Tissue Specificity: Isoform 1 and isoform 2 are expressed in liver, colon and small intestine. Isoform 2 but not isoform 1 is expressed in kidney. Isoform 1 and isoform 2 are not expressed in esophagus. Not expressed in skin. Background: HDC(Histidine decarboxylase) is the enzyme that catalyzes the reaction that produces histamine from histidine with the help of vitamin B6. The HDC gene is mapped on 15q21.2. The deduced 662-amino acid protein has a molecular mass of 74,148 Da. The gene contains 12 exons spanning approximately 24 kb. The biogenic amine histamine is an important modulator of numerous physiologic processes, including neurotransmission, gastric acid secretion, and smooth muscle tone. The biosynthesis of histamine from histidine is catalyzed by the enzyme L-histidine decarboxylase. This homodimeric enzyme is a pyridoxal phosphate(PLP)-dependent decarboxylase and is highly specific for its histidine substrate. Ercan-Sencicek et al. noted that animal studies had shown that lack of Hdc in mice results in increased locomotor and stereotypic behaviors, as well as increased anxiety.
Molecular Weight:	74 kDa
Gene ID:	3067
UniProt:	P19113

Application Details

Application Notes:	Western blot, 0.25-0.5 µg/mL, Human Immunohistochemistry(Paraffin-embedded Section), 2-5 µg/mL, Mouse ELISA, 0.1-0.5 µg/mL, -

1. Bruneau, G., Nguyen, V. C., Gros, F., Bernheim, A., Thibault, J. Preparation of a rat brain histidine decarboxylase (HDC) cDNA probe by PCR and assignment of the human HDC gene to chromosome 15. Hum. Genet. 90: 235-238, 1992. 2. Dere, E., De Souza-Silva, M. A., Spieler, R. E., Lin, J. S., Ohtsu, H., Haas, H. L., Huston, J. P. Changes in motoric, exploratory and emotional behaviours and neuronal acetylcholine content and 5-HT turnover in histidine decarboxylase-KO mice.Europ. J. Neurosci. 20: 1051-1058, 2004. 3. Ercan-Sencicek, A. G., Stillman, A. A., Ghosh, A. K., Bilguvar, K., O'Roak, B. J., Mason, C. E., Abbott, T., Gupta, A., King, R. A., Pauls, D. L., Tischfield, J. A., Heiman, G. A., and 16 others. L-histidine decarboxylase and Tourette's

Application Details

	syndrome. New Eng. J. Med. 362: 1901-1908, 2010.
Restrictions:	For Research Use only

Handling

Format:	Lyophilized
Reconstitution:	Adding 0.2 mL of distilled water will yield a concentration of 500 µg/mL.
Concentration:	500 µg/mL
Buffer:	Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na2HPO4.
Storage:	4 °C,-20 °C
Storage Comment:	At -20°C for one year from date of receipt. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for six months. Avoid repeated freezing and thawing.