Product datasheet

anti-Histidine Decarboxylase rabbit polyclonal, serum

Short overview

Cat. No.	16045
Quantity	50 µl (lyoph.)

Product description

Host	Rabbit
Antibody Type	Polyclonal
Immunogen	Recombinant histidine decarboxylase produced in E. coli
Formulation	Lyophilized; reconstitute in 100 µl dist. water
UniprotID	E2RMU1 (Dog, Canis familiaris),H0WB71 (Guinea pig),P19113 (Human),Q8CHP0 (Mouse),P16453 (Rat)
Synomym	Histidine decarboxylase, HDC, EC 4.1.1.22, HDC
Conjugate	Unconjugated
Purification	Undiluted antiserum
Storage before reconstitution	2-8°C until indicated expiry date
Storage after reconstitution	Up to 3 months at 2-8°C; long term storage in aliquots at -20°C; avoid freeze/thaw cycles
Intended use	Research use only
Application	ICC/IF, IHC, WB
Reactivity	Dog, Guinea pig, Human, Mouse, Rat

Applications

Immunocytochemistry (ICC)	Assay dependent
Immunohistochemistry (IHC) - frozen	1:2,000-1:5,000
Immunohistochemistry (IHC) - paraffin	1:2,000-1:5,000 (microwave treatment recommended)
Western Blot (WB)	1:1,000-1:5,000

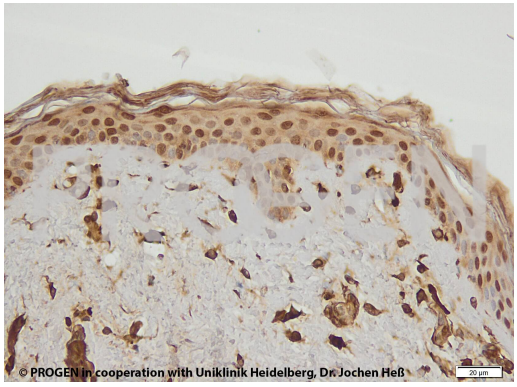
Background

Histidine decarboxylase (HDC) is the enzyme catalyzing the conversion of histidine into histamine. HDC can be found in the histamine secreting ECL cells of some species as well as in the mast cells. Absorption with 10-100 ug immunogen per ml diluted antiserum abolishesthe staining. In 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).Positive control: Stefanini-fixed frozen sections of rat fundus.

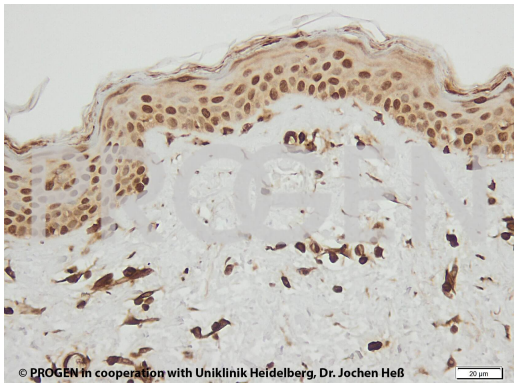
Dartsch, C., Chen, D. & Persson, L. Multiple forms of rat stomach histidine decarboxylase may reflect posttranslational activation of the enzyme.

Regul. Pept. 77, 33-41 (1998).

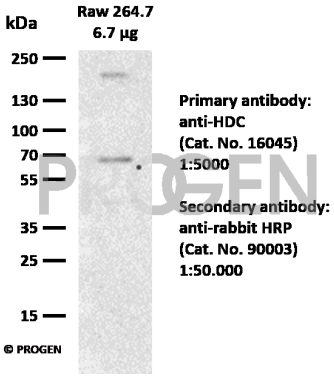
Product images



IHC of human skin (courtesy of J.Heß, University Hospital Heidelberg)



IHC of human skin (courtesy of J.Heß, University Hospital Heidelberg)



WB with anti-HDC antibody (Cat. No. 16045, 1:5000) and secondary anti-rabbit HRP antibody (Cat. No. 90003, 1:50,000), sample Raw246.7 whole cell lysate (6.7 µg)

References

Publication	Species	Application
Oprisoreanu A. M. et al. Drug screening in zebrafish larvae reveals inflammation-related modulators of secondary damage after spinal cord injury in mice., Theranostics, 13, 2531-2551, (2023).	mouse	IHC/IF
Shi X. et al. Hierarchical deployment of Tbx3 dictates the identity of hypothalamic KNDy neurons to control puberty onset., Sci Adv, 8, eabq2987, (2022).	mouse	IHC/IF
Yu, X. et al. Genetic lesioning of histamine neurons increases sleep-wake fragmentation and reveals their contribution to modafinil-induced wakefulness. Sleep. 42, (2019).	mouse	IHC-IF
Liu, K. et al. Lhx6-positive GABA-releasing neurons of the zona incerta promote sleep. Nature. 548, 582-587 (2017).	mouse	IHC-IF (frozen)
Matsuki, Y., Tanimoto, A., Hamada, T. & Sasaguri, Y. Histidine decarboxylase expression as a new sensitive and specific marker for small cell lung carcinoma. Mod Pathol 16, 72â€“78 (2003).	human	IHC (paraffin)