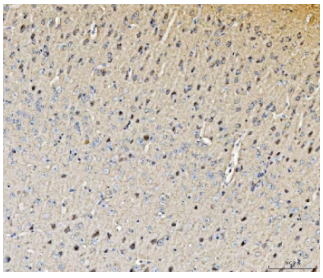
# Histidine decarboxylase Antibody / HDC (RQ6880)

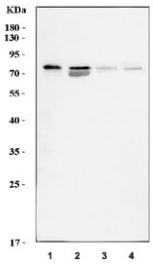
| Catalog No. | Formulation | Size |
|---|---|---|
| RQ6880 | 0.5mg/ml if reconstituted with 0.2ml sterile DI water | 100 ug |

**Bulk quote request**

| | |
|---|---|
| **Availability** | 1-3 business days |
| **Species Reactivity** | Human, Mouse |
| **Format** | Antigen affinity purified |
| **Clonality** | Polyclonal (rabbit origin) |
| **Isotype** | Rabbit IgG |
| **Purity** | Antigen affinity purified |
| **Buffer** | Lyophilized from 1X PBS with 2% Trehalose |
| **UniProt** | P19113 |
| **Localization** | Cytoplasmic |
| **Applications** | Western Blot : 1-2ug/ml<br>Immunohistochemistry (FFPE) : 2-5ug/ml<br>Direct ELISA : 0.1-0.5ug/ml |
| **Limitations** | This Histidine decarboxylase antibody is available for research use only. |



IHC staining of FFPE mouse brain tissue with Histidine decarboxylase antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.




Western blot testing of human 1) HEL, 2) K562, 3) HaCat and 4) HL60 cell lysate with Histidine decarboxylase antibody. Predicted molecular weight: ~74/70 kDa (isoforms 1/2).

## Description

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.

## Application Notes

Optimal dilution of the Histidine decarboxylase antibody should be determined by the researcher.

## Immunogen

Recombinant human protein (amino acids R12-V662) was used as the immunogen for the Histidine decarboxylase antibody.

## Storage

After reconstitution, the Histidine decarboxylase antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.