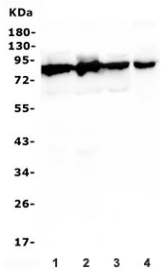
DBH Antibody / Dopamine beta Hydroxylase (RQ5573)

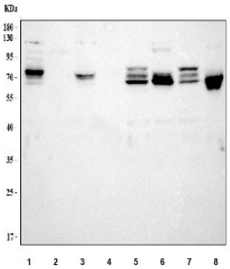
Catalog No.	Formulation	Size
RQ5573	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human, Mouse, Rat
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Affinity purified
Buffer	Lyophilized from 1X PBS with 2% Trehalose and 0.025% sodium azide
UniProt	P09172
Applications	Western Blot : 0.25-0.5ug/ml Direct ELISA : 0.1-0.5ug/ml
Limitations	This DBH antibody is available for research use only.



Western blot testing of 1) rat PC-12, 2) rat liver, 3) mouse liver and 4) human SHG-44 lysate with DBH antibody. Predicted molecular weight ~69 kDa.



Western blot testing of 1) human SH-SY5Y, 2) human Jurkat, 3) human U-87 MG, 4) human U-2 OS, 5) rat brain, 6) rat C6, 7) mouse brain and 8) mouse Neuro-2a cell lysate with DBH antibody. Predicted molecular weight ~69 kDa.

Description

Dopamine beta-hydroxylase (DBH), also known as dopamine beta-monooxygenase, is an enzyme (EC1.14.17.1) that in humans is encoded by the DBH gene. Dopamine beta-hydroxylase catalyzes the chemical reaction. It is mapped to 9q34.2. The protein encoded by this gene is an oxidoreductase belonging to the copper type II, ascorbate-dependent monooxygenase family. The encoded protein, expressed in neuroscretory vesicles and chromaffin granules of the adrenal medulla, catalyzes the conversion of dopamine to norepinephrine, which functions as both a hormone and as the main neurotransmitter of the sympathetic nervous system. The enzyme encoded by this gene exists exists in both soluble and membrane-bound forms, depending on the absence or presence, respectively, of a signal peptide. Mutations in this gene cause dopamine beta-hydroxylate deficiency in human patients, characterized by deficits in autonomic and cardiovascular function, including hypotension and ptosis. Polymorphisms in this gene may play a role in a variety of psychiatric disorders.

Application Notes

Optimal dilution of the DBH antibody should be determined by the researcher.

Immunogen

A human recombinant protein (amino acids S40-N545) was used as the immunogen for the DBH antibody.

Storage

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