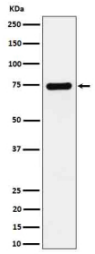
DBH Antibody / Dopamine beta Hydroxylase [clone 31D18] (FY12151)

Catalog No.	Formulation	Size
FY12151	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA	100 ul

Recombinant RABBIT MONOCLONAL

Bulk quote request

Availability	2-3 weeks
Species Reactivity	Human
Format	Liquid
Host	Rabbit
Clonality	Recombinant Rabbit Monoclonal
Isotype	Rabbit IgG
Clone Name	31D18
Purity	Affinity-chromatography
Buffer	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.
UniProt	P09172
Applications	Western Blot : 1:500-1:2000 Immunohistochemistry : 1:50-1:200
Limitations	This DBH antibody is available for research use only.



Western blot analysis of Dopamine beta Hydroxylase expression in SH-SY5Y cell lysate using DBH antibody.

Description

DBH antibody detects dopamine beta hydroxylase, a copper-containing monooxygenase that catalyzes the conversion of dopamine to norepinephrine. This enzyme is expressed in the adrenal medulla and sympathetic neurons, where it plays a

central role in catecholamine biosynthesis. DBH is localized within secretory vesicles, releasing norepinephrine into synaptic clefts and the circulatory system in response to stress and neuronal activation.

Research using DBH antibody has provided insight into neurobiology and disease. Alterations in DBH expression or activity can affect sympathetic nervous system function, influencing blood pressure regulation, stress responses, and mood. Low DBH activity has been associated with hypotension and autonomic dysfunction, while elevated activity contributes to hypertension. Genetic polymorphisms in DBH have been studied in relation to psychiatric disorders including schizophrenia, depression, and addiction.

DBH is also a marker of noradrenergic neurons and is used in neuroscience to study neuronal populations. In adrenal studies, DBH expression reflects catecholamine production capacity. Its role in neurotransmitter regulation makes it a therapeutic target in cardiovascular and psychiatric research. Additionally, DBH autoantibodies have been identified in certain autoimmune conditions, linking it to neuroimmune mechanisms.

Antibodies against DBH are validated for immunohistochemistry, immunofluorescence, ELISA, and western blot. These reagents allow detection of DBH in tissue sections, cell culture, and biological fluids. Clone-based DBH antibodies ensure reliable specificity for norepinephrine-related research.

NSJ Bioreagents supplies this DBH antibody for research into catecholamine biosynthesis, neurobiology, and disease.

Application Notes

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

Immunogen

A synthesized peptide derived from human Dopamine beta Hydroxylase was used as the immunogen for the DBH antibody.

Storage

Store the DBH antibody at -20oC.