

TPH1 / Tryptophan Hydroxylase 1 Antibody

Mouse Monoclonal Antibody [Clone TPH1/7662]

Catalog No	Format	Size
7166-MSM2-P0	Purified Ab with BSA and Azide at 200ug/ml	20 ug
7166-MSM2-P1	Purified Ab with BSA and Azide at 200ug/ml	100 ug
7166-MSM2-P1ABX	Purified Ab WITHOUT BSA and Azide at 1.0mg/ml	100 ug

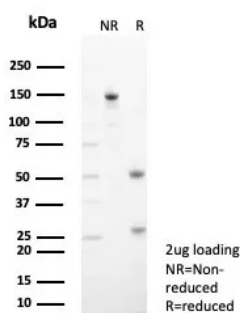
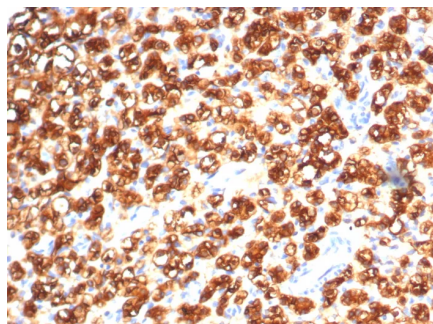
Applications	Tested Dillution	Note
Immunohistochemistry (IHC)	1-2ug/ml	30 min at RT. Staining of formalin-fixed tissues requires heating tissue sections in 10mM Tris with 1mM EDTA, pH 9.0, for 45 min at 95°C followed by cooling at RT for 20 minutes

Product Details

Clone	TPH1/7662
Gene Name	TPH1
Immunogen	Recombinant full-length human TPH1 protein
Host	Mouse
Clonality	Monoclonal
Isotype / Light Chain	IgG2 / Kappa
Mol. Weight of Antigen	50.9kDa
Cellular Localization	Cytoplasm. Nucleus.
Species Reactivity	Human
Positive Control	Human brain or kidney.

*Optimal dilution for a specific application should be determined.

Product Images for TPH1 / Tryptophan Hydroxylase 1 Antibody



Formalin-fixed, paraffin-embedded human kidney cancer stained with TPH1 Mouse Monoclonal Antibody (TPH1/7662). HIER: Tris/EDTA, pH9.0, 45min. 2°C: HRP-polymer, 30min. DAB, 5min.

SDS-PAGE Analysis of Purified TPH1 Mouse Monoclonal Antibody (TPH1/7662). Confirmation of Purity and Integrity of Antibody.

Specificity & Comments

Phenylalanine hydroxylase (PAH), tyrosine hydroxylase (TH) and tryptophan hydroxylase (TPH) comprise a small family of monooxygenases that use tetrahydropterine as a cofactor during the catabolism of aromatic L-amino acids. PAH, TH and TPH all contain catalytic domains with an amino-terminal regulatory domain and a short carboxy-terminal tetramerization domain. Each of these enzymes also contains a single ferrous iron atom, which is bound to two histidines and a glutamate, and is likely to be involved in the formation of the hydroxylating intermediate. TPH is both the first and rate-limiting-step in the biosynthesis of serotonin in the central nervous system and melatonin in the pineal gland. Alteration of TPH function may be a key factor in the pathology of several neuropsychiatric disorders associated with serotonin, including depression, aggression, alcoholism and schizophrenia. For instance, LDOPA, which is used as a common therapy for Parkinson's disease (PD) patients, inhibits TPH function which, subsequently, is thought to contribute to the onset of depression in PD patients.

Limitations and Warranty

This antibody is available for research use only and is not approved for use in diagnosis. There are no warranties, expressed or implied, which extend beyond this description. Company is not liable for any personal injury or economic loss resulting from this product.

Supplied As

200ug/ml of Ab purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1.0mg/ml.

Storage and Stability

Antibody with azide - store at 2 to 8°C. Antibody without azide - store at -20 to -80°C. Antibody is stable for 24 months. Non-hazardous. No MSDS required.

Research Areas

Cardiovascular, Mast Cell Marker, Neuroscience, Signal Transduction