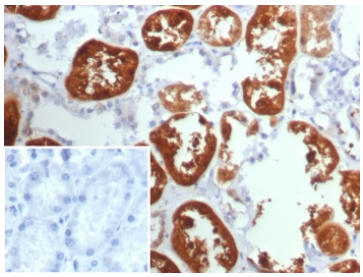
TPH1 Antibody / Tryptophan Hydroxylase [clone TPH1/7661] (V4147)

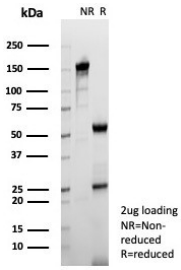
Catalog No.	Formulation	Size
V4147-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 ug
V4147-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	20 ug
V4147SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG2, kappa
Clone Name	TPH1/7661
Purity	Protein A/G affinity
UniProt	P17752
Localization	Cytoplasm, Nucleus
Applications	Immunohistochemistry (FFPE): 1-2ug/ml for 30 minutes at RT
Limitations	This TPH1 antibody is available for research use only.



IHC staining of FFPE human kidney cancer with TPH1 antibody (clone TPH1/7661). Inset: PBS used in place of primary Ab (secondary Ab negative control). HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 20 min and allow to cool before testing.



SDS-PAGE analysis of purified, BSA-free TPH1 antibody (clone TPH1/7661) as confirmation of integrity and purity.

Description

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.

Application Notes

Optimal dilution of the TPH1 antibody should be determined by the researcher.

Immunogen

Recombinant full-length human TPH1 protein was used as the immunogen for the TPH1 antibody.

Storage

Aliquot the TPH1 antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.

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