Tryptophan Hydroxylase 1 (TPH1) Rabbit mAb

Catalog No: #48950

Package Size: #48950-1 50ul #48950-2 100ul

Signalway Antibody
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Support: tech@signalwayantibody.com

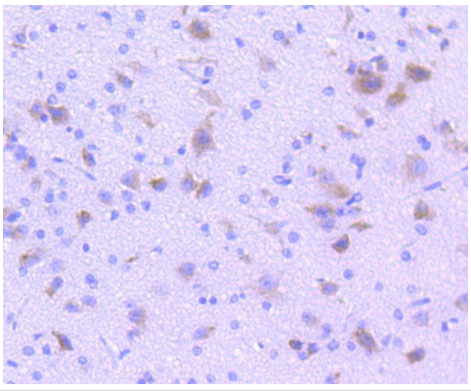
Description

Product Name	Tryptophan Hydroxylase 1 (TPH1) Rabbit mAb
Host Species	Recombinant Rabbit
Clonality	Monoclonal
Clone No.	SC53-07
Purification	ProA affinity purified
Applications	WB, ICC/IF, IHC, IP, FC
Species Reactivity	Hu, Ms, Rt
Immunogen Description	recombinant protein
Conjugates	Unconjugated
Other Names	Indoleacetic acid 5 hydroxylase antibody L tryptophan hydroxylase antibody MGC119994 antibody TPH 1 antibody TPH antibody TPH1 antibody TPH1_HUMAN antibody TPRH antibody TRPH antibody Tryptophan 5 hydroxylase 1 antibody Tryptophan 5 monooxygenase 1 antibody Tryptophan 5 monooxygenase antibody Tryptophan 5-hydroxylase 1 antibody Tryptophan 5-monooxygenase 1 antibody Tryptophan hydroxylase 1 antibody
Accession No.	Swiss-Prot#:P17752
Calculated MW	51 kDa
Formulation	1*TBS (pH7.4), 1%BSA, 40%Glycerol. Preservative: 0.05% Sodium Azide.
Storage	Store at -20°C

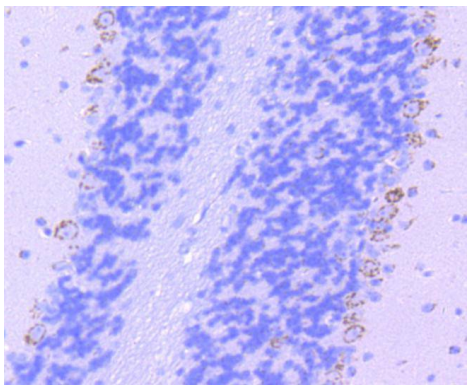
Application Details

WB: 1:1,000 IHC: 1:50-1:200 ICC: 1:50-1:200FC: 1:50-1:100

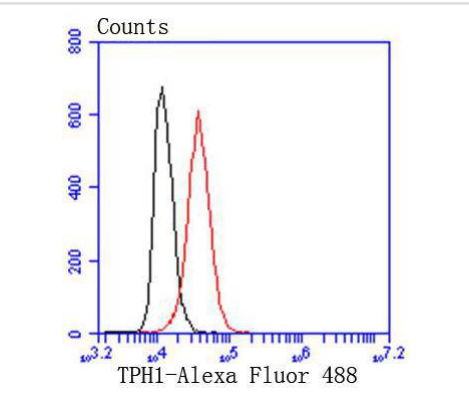
Images



Immunohistochemical analysis of paraffin-embedded rat brain tissue using anti-TPH1 antibody. Counter stained with hematoxylin.



Immunohistochemical analysis of paraffin-embedded mouse cerebellum tissue using anti-TPH1 antibody. Counter stained with hematoxylin.



Flow cytometric analysis of Hela cells with TPH1 antibody at 1/50 dilution (red) compared with an unlabelled control (cells without incubation with primary antibody; black). Alexa Fluor 488-conjugated goat anti rabbit IgG was used as the secondary antibody.

Background

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 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, L-DOPA, which is used as a common therapy for Parkinsons disease (PD) patients, inhibits TPH function, which subsequently, is thought to contribute to the onset of depression in PD patients.

References

Note: This product is for in vitro research use only and is not intended for use in humans or animals.