

TPH1 antibody

Catalog No: #38257

Package Size: #38257-1 50ul #38257-2 100ul

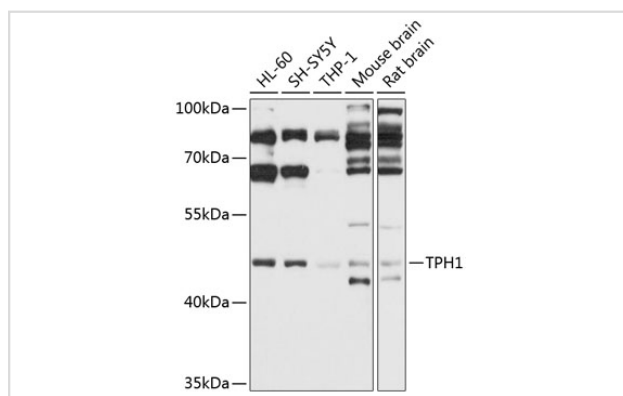
Description

Product Name	TPH1 antibody
Host Species	Rabbit
Clonality	Polyclonal
Purification	Antibodies were purified by affinity purification using immunogen.
Applications	WB
Species Reactivity	Human,Mouse,Rat
Specificity	The antibody detects endogenous level of total TPH1 protein.
Immunogen Type	Recombinant Protein
Immunogen Description	Recombinant protein of human TPH1.
Conjugates	Unconjugated
Target Name	TPH1
Other Names	TPH1;MGC119994;TPRH;TRPH;Tryptophan 5-hydroxylase 1;
Accession No.	Swiss-Prot#: P17752NCBI Gene ID: 7166
SDS-PAGE MW	55kd
Concentration	1.0mg/ml
Formulation	Supplied at 1.0mg/mL in phosphate buffered saline (without Mg ²⁺ and Ca ²⁺), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Storage	Store at -20°C

Application Details

WB 1:500 - 1:2000

Images



Western blot analysis of extracts of various cell lines, using TPH1 at 1:1000 dilution.

Background

Tryptophan hydroxylase (TPH) is the rate-limiting enzyme in the biosynthesis of serotonin (1) by converting tryptophan to 5-hydroxy-L-tryptophan (2).

Two isoforms of TPH exist: TPH-1 is mainly expressed in the periphery, whereas the expression of TPH-2 is restricted to neuronal cells and the central nervous system (3). Most of the serotonin found throughout the body is synthesized by TPH-1 in enterochromaffin cells of the gastrointestinal tract. Targeted disruption of the tph1 gene results in low levels of circulating and tissue serotonin (4).

Published Papers

el at., 5-HT_{2A} Receptor and 5-HT Degradation Play a Crucial Role in Atherosclerosis by Modulating Macrophage Foam Cell Formation, Vascular Endothelial Cell Inflammation, and Hepatic Steatosis. In J Atheroscler Thromb on 2021 Feb 2 by Yingying Ma, Xiurui Liang,et al..PMID: 33536397, , (2021)
[PMID:33536397](#)

el at., 5-HT_{2A} Receptor and 5-HT Degradation Play a Crucial Role in Atherosclerosis by Modulating Macrophage Foam Cell Formation, Vascular Endothelial Cell Inflammation, and Hepatic Steatosis In J Atheroscler Thromb on 2022 Mar 1 by Yingying Ma, Xiurui Liang,et al..PMID: 33536397, , (2022)
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Jing Guan;Xin Tong;Yi Zhang;Fan Xu;Yuxin Zhang;Xiurui Liang;Jiaqi Jin;Hongyan Jing;Liuxian Guo;Xinrui Ni;Jihua Fu el at., Nephrotoxicity induced by cisplatin is primarily due to the activation of the 5-hydroxytryptamine degradation system in proximal renal tubules, , (2021)
[PMID:](#)

Fan Xu;Jiaqi Jin;Yi Zhang;Jing Guan;Xiurui Liang;Yuxin Zhang;Ansheng Yuan;Runkun Liu;Jihua Fu el at., The activation of 5-hydroxytryptamine degradation system in proximal renal tubular epithelial cells induced by renal ischemia-reperfusion injury, , (2021)
[PMID:](#)

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