Antibodies

Catalog #60058

Anti-Tyrosine Hydroxylase Antibody, Clone TH-2

Mouse monoclonal IgG1 antibody against human, rat, cow tyrosine hydroxylase, unconjugated

200 µL

STEMCELL™ TECHNOLOGIES
Scientists Helping Scientists™ | WWW.STEMCELL.COM
TOLL FREE PHONE 1 800 667 0322 • PHONE +1 604 877 0713
INFO@STEMCELL.COM • TECHSUPPORT@STEMCELL.COM
FOR GLOBAL CONTACT DETAILS VISIT OUR WEBSITE

Product Description

The TH-2 antibody clone recognizes an epitope present in the N-terminal region of both rodent (~60 kDa) and human (62 - 68 kDa) tyrosine hydroxylase (TH). TH catalyzes the hydroxylation of L-tyrosine to L-3,4 dihydroxyphenylalanine (L-dopa) in brain and adrenal medulla and can therefore be used to detect dopaminergic neurons. L-dopa is required for the biosynthesis of catecholamines (dopamine, norepinephrine, and epinephrine), which function as neurotransmitters and hormones.

Target Antigen Name:	Tyrosine Hydroxylase
Alternative Names:	Tyrosine 3-hydroxylase, Tyrosine 3-monooxygenase
Gene ID:	7054 (human), 25085 (rat)
Species Reactivity:	Human, Rat, Cow, Guinea pig, Monkey, Rabbit, Sheep
Host Species:	Mouse
Clonality:	Monoclonal
Clone:	TH-2
Isotype:	IgG1
Immunogen:	Rat tyrosine hydroxylase
Conjugate:	Unconjugated

Applications

Verified:	ICC
Reported:	ELISA, ICC, IF, IHC, IP, WB

Abbreviations: CellSep: Cell separation; ChIP: Chromatin immunoprecipitation; FA: Functional assay; FACS: Fluorescence-activated cell sorting; FC: Flow cytometry; ICC: Immunocytochemistry; IF: Immunofluorescence microscopy; IHC: Immunohistochemistry; IP: Immunoprecipitation; RIA: Radioimmunoassay; WB: Western blotting

Properties

Formulation:	Mouse ascites fluid containing < 0.1% sodium azide
Purification:	The antibody was purified by column chromatography.
Stability and Storage:	Product stable at -20°C when stored undiluted. For product expiry date, please contact techsupport@stemcell.com.
Directions for Use:	For immunocytochemistry the suggested concentration of this antibody is a 1:400 dilution. It is recommended that the antibody be titrated for optimal performance for each application. For instructions on how to use this antibody, refer to the Technical Manual: In Vitro Proliferation and Differentiation of Human Neural Stem and Progenitor Cells Using NeuroCult™ or NeuroCult™-XF (Document #28724), available at www.stemcell.com or contact us to request a copy.

Related Products

For a complete list of antibodies, including other conjugates, sizes and clones, as well as related products available from STEMCELL Technologies, please visit our website at www.stemcell.com/antibodies or contact us at techsupport@stemcell.com.

References

1. Beveridge TS et al. (2015) Anatomy of the nerves and ganglia of the aortic plexus in males. J Anat 226(1): 93–103. (IHC)
2. Broms J et al. (2015) Conserved expression of the GPR151 receptor in habenular axonal projections of vertebrates. J Comp Neurol 523(3): 359–80. (IF, IHC)
3. Nadella R et al. (2014) Transient transfection of human CDNF gene reduces the 6-hydroxydopamine-induced neuroinflammation in the rat substantia nigra. J Neuroinflammation 11: 209. (IF, IHC)
4. Arita DY et al. (2002) Purification and characterization of the active form of tyrosine hydroxylase from mesangial cells in culture. J Cell Biochem 87(1): 58–64.
5. Nagatsu T et al. (1964) Tyrosine hydroxylase. The initial step in norepinephrine biosynthesis. J Biol Chem 239: 2910–7.