Tyrosine Hydroxylase Antibody

Monoclonal Mouse IgG_1 Clone # TH-2

Catalog Number: MAB1423

DESCRIPTION

Specificity	Detects rodent, monkey, bovine, sheep, rabbit, guinea pig, and human tyrosine hydroxylase. It recognizes an epitope present in the N-terminal region (approximately amino acids 9-16) of tyrosine hydroxylase.
Source	Monoclonal Mouse IgG_1 Clone # TH-2
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Rat tyrosine hydroxylase
Formulation	Supplied as a 0.2 µm filtered solution in PBS. See Certificate of Analysis for details.

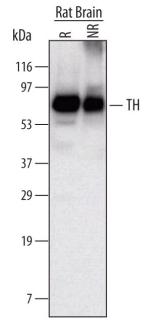
APPLICATIONS

Please Note: *Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.*

	Recommended Concentration	Sample
Western Blot	2 µg/mL	See Below
Immunohistochemistry	8-25 µg/mL	Perfusion fixed frozen sections of rat brain
Immunoprecipitation	Arita, D. *et al.* (2002) J. Cell Biochem. **87**:58.	

DATA

Western Blot



Detection of Tyrosine Hydroxylase by Western Blot. Western blot shows lysates of rat brain tissue under reducing and non-reducing conditions. PVDF membrane was probed with 2 µg/mL Tyrosine Hydroxylase Monoclonal Antibody (Catalog # MAB1423) followed by HRP-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # HAF007). A specific band for Tyrosine Hydroxylase was detected at approximately 60 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.

PREPARATION AND STORAGE

Shipping	The product is shipped with dry ice or equivalent. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	● 12 months from date of receipt, -20 to -70 °C, as supplied. ● 1 month from date of receipt, 2 to 8 °C, as supplied.

BACKGROUND

Tyrosine hydroxylase is a tetrameric enzyme that catalyzes the hydroxylation of L-tyrosine to L-3,4-dihydroxyphenyalanine (L-dopa) in brain and andrenal medulla. This is the rate-limiting step in the biosynthesis of catecholamines, such as dopamine, norepinephrine, and epinephrine that serve as neurotransmitters and hormones (1).

References:

1. Nagatsu, T. *et al.* (1964) J. Biol. Chem. **239**:2910
2. Arita, D. *et al.* (2002) J. Cell Biochem. **87**:58.