Tyrosine Hydroxylase(Ab-31) Antibody

Catalog No: #21294

Package Size: #21294-1 50ul #21294-2 100ul

Signalway Antibody
Orders: order@signalwayantibody.com
Support: tech@signalwayantibody.com

Description

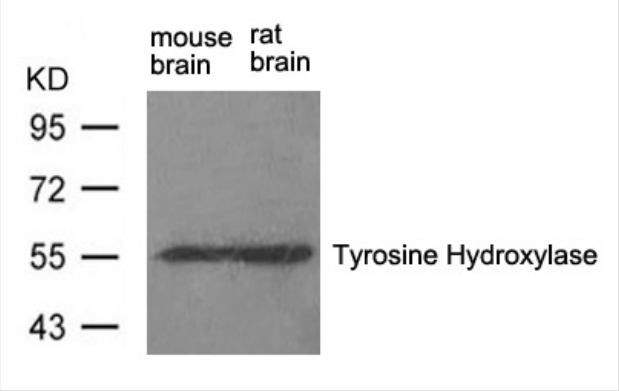
Product Name	Tyrosine Hydroxylase(Ab-31) Antibody
Host Species	Rabbit
Clonality	Polyclonal
Purification	Antibodies were produced by immunizing rabbits with synthetic peptide and KLH conjugates. Antibodies were purified by affinity-chromatography using epitope-specific peptide.
Applications	WB
Species Reactivity	Ms Rt
Specificity	The antibody detects endogenous levels of total Tyrosine Hydroxylase protein.
Immunogen Type	Peptide-KLH
Immunogen Description	Peptide sequence around aa.29~33(V-T-S-P-R)derived from Mouse Tyrosine Hydroxylase.
Conjugates	Unconjugated
Target Name	Tyrosine Hydroxylase
Other Names	TYH; DYT14; DYT5b; TH;
Accession No.	Swiss-Prot: P07101NCBI Protein: NP_954986.2
Concentration	1.0mg/ml
Formulation	Supplied at 1.0mg/mL in phosphate buffered saline (without Mg2+ and Ca2+), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Storage	Store at -20°C for long term preservation (recommended). Store at 4°C for short term use.

Application Details

Predicted MW: 55-60kd

Western blotting: 1:500~1:1000

Images



Western blot analysis of extract from rat brain and mouse brain using Tyrosine Hydroxylase(Ab-31) Antibody #21294.

Background

Tyrosine hydroxylase (TH) catalyzes the rate-limiting step in the synthesis of the neurotransmitter dopamine and other catecholamines. TH functions as a tetramer, with each subunit composed of a regulatory and catalytic domain, and exists in several different isoforms . This enzyme is required for embryonic development since TH knockout mice die before or at birth . Levels of transcription, translation and posttranslational modification regulate TH activity. The amino-terminal regulatory domain contains three serine residues: Ser9, Ser31 and Ser40. Phosphorylation at Ser40 by PKA positively regulates the catalytic activity of TH . Phosphorylation at Ser31 by CDK5 also increases the catalytic activity of TH through stabilization of TH protein levels.

Kumer, S.C. and Vrana, K.E. (1996) J Neurochem 67, 443-62.

Bodeau-P

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