BOSTER
antibody and ELISA experts

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Anti-Phospho-Tyrosine Hydroxylase (Ser31) Antibody

Catalog Number: P01917

About TH

Tyrosine hydroxylase (TH) is the rate-limiting enzyme in the synthesis of the catecholamines dopamine and norepinephrine. TH antibodies can therefore be used as markers for dopaminergic and noradrenergic neurons in a variety of applications including depression, schizophrenia, Parkinson's disease and drug abuse (Kish et al., 2001; Zhu et al., 2000; Zhu et al., 1999). TH antibodies can also be used to explore basic mechanisms of dopamine and norepinephrine signaling (Witkovsky et al., 2000; Salvatore et al., 2001; Dunkley et al., 2004). The activity of TH is also regulated by phosphorylation (Haycock et al., 1982; Haycock et al., 1992; Jedynak et al., 2002). Phospho-specific antibodies for the phosphorylation sites on TH can be used to great effect in studying this regulation and in identifying the cells in which TH phosphorylation occurs.

Overview

Product Name	Anti-Phospho-Tyrosine Hydroxylase (Ser31) Antibody
Reactive Species	Human, Mouse, Rat
Description	Boster Bio Anti-Phospho-Tyrosine Hydroxylase (Ser31) Antibody (Catalog # P01917). Tested in WB, IHC, ICC applications. This antibody reacts with Human, Mouse, Rat.
Application	IHC, ICC, WB
Clonality	Polyclonal 608
Formulation	10 mM HEPES (pH 7.5), 150 mM NaCl, 100 µg per ml BSA and 50% glycerol.
Storage Instructions	Storage at -20°C is recommended, as aliquots may be taken without freeze/thawing due to presence of 50% glycerol. Stable for at least 1 year at -20°C. After date of receipt, stable for at least 1 year at -20°C.
Host	Rabbit
Uniprot ID	P04177

Technical Details

Immunogen	Synthetic phospho-peptide corresponding to amino acid residues surrounding Ser31 of rat tyrosine hydroxylase, conjugated to keyhole limpet hemocyanin (KLH). Immunogen species is Rat.
Predicted Reactive Species	Primate
Cross Reactivity	No cross reactivity with other proteins.
Isotype	IgG
Form	Liquid
Concentration	0.5-1mg/ml, actual concentration vary by lot. Use suggested dilution ratio to decide dilution

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	procedure.
Purification	Prepared from pooled rabbit serum by affinity purification via sequential chromatography on phospho and non-phosphopeptide affinity columns.
Suggested Dilutions	Dilute the sample so that the expected range of concentrations fall within the detection range of this kit. If the expected range of concentration is unknown, a pilot test should be conducted to decide the optimal dilution ratio for your samples. Some PubMed article(s) citing the expression level of this target are as follows: Boster Bio's internal QC testing used: WB: 1:1000 IHC: 1:300-1:1000 ICC: 1:50-1:300

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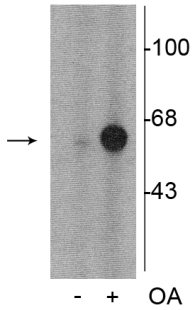
Anti-Phospho-Tyrosine Hydroxylase (Ser31) Antibody (P01917) Images



Western blot of PC-12 cell lysate incubated in the absence (-) and presence (+) of okadaic acid (OA, 1 uM for 60 min) showing specific immunolabeling of the ~60 kDa tyrosine hydroxylase phosphorylated at Ser^{31}.

2 Publications Citing This Product

1. PubMed ID: 23346371, Huang J, Zhu C, Zhang P, Zhu Q, Liu Y, Zhu Z, Wang M, Li W, Yang G, Dong N, Liu J, Chen L, Zhang Y, Yang R, Deng L, Fan J, Wang X, Liu J, Ma B, Fu Q, Wu K. Sci Rep. 2013;3:1114. Doi: 10.1038/Srep01114. Epub 2013 Jan 23. S100+ Cells: A New Neuro-Im...

2. PubMed ID: 22553539, Wan C, Liu Nn, Liu Lm, Cai N, Chen L. Int J Ophthalmol. 2010;3(2):145-8. Doi: 10.3980/J.Issn.2222-3959.2010.02.12. Epub 2010 Jun 18. Effect Of Adenovirus-Mediated Brain Derived Neurotrophic Factor In Early Retinal Neuropathy Of Diabetes In Rats.

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