ARG52464
anti-Tyrosine Hydroxylase phospho (Ser40) antibody

Package: 50 µl
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes Tyrosine Hydroxylase phospho (Ser40)
Tested Reactivity	Hu, Ms, Rat, Mamm
Tested Application	ICC/IF, IHC-P, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	Tyrosine Hydroxylase
Species	Rat
Immunogen	Synthetic phospho-peptide corresponding to amino acid residues surrounding Ser40 conjugated to KLH
Conjugation	Un-conjugated
Alternate Names	DYT14; TYH; Tyrosine 3-monooxygenase; Tyrosine 3-hydroxylase; TH; DYT5b; EC 1.14.16.2

Application Instructions

Application table

Application	Dilution
ICC/IF	1:1000
IHC-P	1:1000
WB	1:1000

Application Note

Specific for the ~60k tyrosine hydroxylase protein phosphorylated at Ser40. Some higher molecular weight bands may be detected by the antibody depending upon the brain region being studied, protein loads and the detection methods used. The antibody has three orders of magnitude selectivity over dephospho TH.
* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

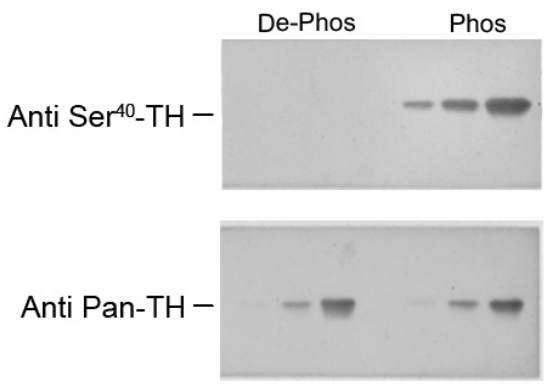
Properties

Form	Liquid
Purification	Affinity Purified
Buffer	10 mM HEPES (pH 7.5), 150 mM NaCl, 0.1 mg/ml BSA and 50% Glycerol
Stabilizer	0.1 mg/ml BSA, 50% Glycerol
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

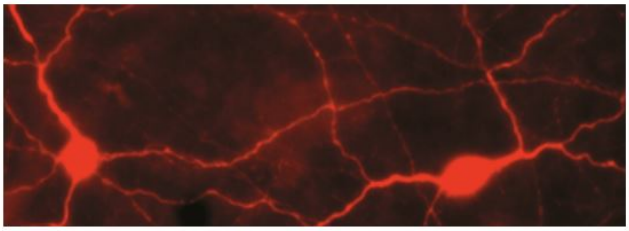
Gene Symbol	TH
Gene Full Name	tyrosine hydroxylase
Background	Tyrosine hydroxylase (TH) is the rate-limiting enzyme in the synthesis of the catecholamines Dopamine and Norepinephrine. TH antibodies can therefore be used as markers for dopaminergic and noradrenergic neurons in a variety of applications 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.
Highlight	Related Antibody Duos and Panels: ARG30212 Phospho Tyrosine Hydroxylase Antibody Panel (Total, pS31, pS40) Related products: Tyrosine Hydroxylase antibodies; Tyrosine Hydroxylase Duos / Panels; Anti-Rabbit IgG secondary antibodies; Related news: Astrocyte-to-neuron conversion for Parkinson's disease treatment
Research Area	Cancer antibody; Metabolism antibody; Neuroscience antibody
Calculated Mw	59 kDa

Images



ARG52464 anti-Tyrosine Hydroxylase phospho (Ser40) antibody WB image

Western blot: Recombinant phospho- and dephospho-Tyrosine Hydroxylase. The blots were stained with anti-pan Tyrosine Hydroxylase antibody and ARG52464 anti-Tyrosine Hydroxylase phospho (Ser40) antibody.



ARG52464 anti-Tyrosine Hydroxylase phospho (Ser40) antibody IHC image

Immunohistochemistry: Light-stimulated Rabbit retina stained with ARG52464 anti-Tyrosine Hydroxylase phospho (Ser40) antibody showing labeling of TH when phosphorylated at Ser40.