

Phospho (Ser¹⁹) Tyrosine Hydroxylase Antibody

CATALOG NO:	3612-30T 30 µg (Trial size) 3612-100 100 µg
HOST:	Rabbit
IMMUNOGEN:	Phosphopeptide corresponding to amino acid residues surrounding the phospho-Ser ¹⁹ of rat tyrosine hydroxylase.
SPECIES REACTIVITY:	Mammalian, Rat
PURIFICATION:	Prepared from rabbit serum by affinity purification via sequential chromatography on phospho- and dephosphopeptide affinity columns.
FORMULATION:	In 10 mM HEPES (pH 7.5), 150 mM NaCl, 100 µg per ml BSA and 50% glycerol.
STORAGE CONDITIONS:	Store at -20°C.

DESCRIPTION:

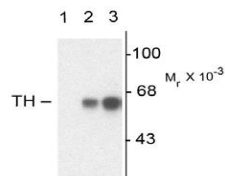
Tyrosine hydroxylase (TH) is the rate-limiting enzyme in the synthesis of the catecholamines Dopamine and Norepinephrine. TH antibodies can therefore be used as markers for dopaminergic and noradrenergic neurons in a variety of applications including depression, schizophrenia, Parkinson's disease and 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.

SPECIFICITY:

Antibody is specific for the ~60 kDa tyrosine hydroxylase protein phosphorylated at Ser¹⁹. The antibody has been directly tested for reactivity in rat and a variety of other mammalian tissues.

APPLICATION AND USAGE:

The antibody can be used for Western blotting (1:1000), Immunofluorescence (1:1000) and Immunohistochemistry (1:1000). However, the optimal conditions should be determined individually.



Western blot of non-phospho-recombinant tyrosine hydroxylase (Lane 1), PC-12 cell lysate (Lane 2), and PC-12 cell lysate stimulated with KCl, 30 mM for 10 min (Lane 3) showing specific immunolabeling of the ~60k tyrosine hydroxylase phosphorylated at Ser¹⁹. Specific immunolabeling of the ~60kDa TH protein.

RELATED PRODUCTS:

- Phospho (Ser³¹)Tyrosine Hydroxylase Antibody (**Cat. No. 3613-100**)
- Tyrosine Hydroxylase Antibody (**Cat. No. 3615-100**)
- Phospho (Tyr^{147z}) NMDA NR2B-Subunit Antibody (**Cat. No. 3616-100**)
- Phospho-Tyrosine Hydroxylase Antibody (**Cat. No. 3649-100**)
- PTP1B Antibody (**Cat. No. 3122-100**)
- PTP1B Antibody (**Cat. No. 3171-100**)
- PTP1B Antibody (**Cat. No. 3174-100**)

FOR RESEARCH USE ONLY! Not to be used on humans.