

# Product Information



## Tyrosine Hydroxylase (Phospho-Ser<sup>31</sup>) Polyclonal Antibody

Item No. 10009413

<b>Synonym:</b>	TH
<b>Supplied as:</b>	100 µl of affinity-purified antibody in 10mM HEPES (pH 7.5), 150 mM NaCl, 100 µg per ml BSA and 50% glycerol
<b>Host:</b>	Rabbit
<b>Antigen:</b>	Phosphopeptide corresponding to amino acid residues surrounding phospho-Ser <sup>31</sup> of rat TH
<b>Cross Reactivity:</b>	(+) Mouse and rat TH
<b>Stability:</b>	≥1 year at -20°C
<b>Application:</b>	The recommended starting dilution for western blot, immunofluorescence (frozen sections), and immunohistochemistry (frozen sections), is 1:1,000.

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.<sup>1-3</sup> TH antibodies can also be used to explore basic mechanisms of dopamine and norepinephrine signalling.<sup>4-6</sup> The activity of TH is also regulated by phosphorylation.<sup>7-9</sup> 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.

### References

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