

# Product Information



## Dopamine Transporter (Extracellular Loop 2) Polyclonal Antibody

Catalog No. 10009373

<b>Synonym:</b>	DAT (Extracellular Loop 2)
<b>Supplied as:</b>	100 µl of affinity-purified antibody in 10 mM HEPES, pH 7.5, containing 150 mM NaCl, 100 µg/ml BSA, and 50% glycerol.
<b>Host:</b>	Rabbit
<b>Antigen:</b>	Peptide from the extracellular loop 2 (EL2) region of human DAT
<b>Cross Reactivity:</b>	Western blot (WB): (+) human striatal samples (SDS-solubilized) DAT; immunohistochemistry (IHC): human and monkey brain (formaldehyde-fixed) DAT
<b>Stability:</b>	≥1 year at -20°C
<b>Applications:</b>	The recommended starting dilutions for western blot and immunohistochemistry is 1:1,000. Other applications were not attempted and therefore optimal working dilutions should be determined empirically.

The dopamine transporter (DAT) is responsible for the reaccumulation of dopamine after it has been released. DAT antibodies and antibodies for other markers of catecholamine biosynthesis are widely 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> Levels of DAT protein expression are altered by chronic drug administration.<sup>4</sup>

### References

1. Kish, S.J., Kalasinsky, K.S., Derkach, P., *et al.* Striatal dopaminergic and serotonergic markers in human heroin users. *Neuropsychopharmacology* **24**, 561-567 (2001).
2. Zhu, M.Y., Klimek, V., Haycock, J.W., *et al.* Quantitation of tyrosine hydroxylase protein in the locus coeruleus from postmortem human brain. *J. Neurosci. Meth.* **99**, 37-44 (2000).
3. Zhu, M.Y., Klimek, V., Diley, G.E., *et al.* Elevated levels of tyrosine hydroxylase in the locus coeruleus in major depression. *Biol. Psychiatry* **46**, 1275-1286 (1999).
4. Wilson, J.M., Kalasinsky, K.S., Levey, A.I., *et al.* Striatal dopamine nerve terminal markers in human, chronic methamphetamine users. *Nat. Med.* **2**, 699-703 (1996).

### Related Products

Dopamine β-hydroxylase (C-Term; human) Polyclonal Antibody - Cat. No. 10009370 • Dopamine β-hydroxylase (N-Term; human) Polyclonal Antibody - Cat. No. 10009371 • Dopamine Transporter (C-Term) Polyclonal Antibody - Cat. No. 10009372

**WARNING: THIS PRODUCT IS FOR LABORATORY RESEARCH ONLY: NOT FOR ADMINISTRATION TO HUMANS. NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.**

#### MATERIAL SAFETY DATA

This material should be considered hazardous until information to the contrary becomes available. Do not ingest, swallow, or inhale. Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling. This information contains some, but not all, of the information required for the safe and proper use of this material. Before use, the user must review the complete Material Safety Data Sheet, which has been sent via email to your institution.

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