

# Anti-Dopamine Transporter, C-Terminus Antibody



**PhosphoSolutions®**  
Antibodies that work™

**Catalog #:** 431-DATC

**Size:** 100 µl

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Host	Applications	Species Tested	Species Reactivity*	Molecular Reference
Rabbit	WB 1:1000 IHC 1:1000 (frozen sections)	H, M, NHP		~88 kDa

**Product Description:** Affinity purified rabbit polyclonal antibody.

**Biological Significance:** 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 (Kish et al., 2001; Zhu et al., 2000; Zhu et al., 1999). Levels of DAT protein expression are altered by chronic drug administration (Wilson et al., 1996).

**Antigen:** Peptide from the intracellular C-terminus region of human dopamine transporter (DAT), conjugated to keyhole limpet hemocyanin (KLH).

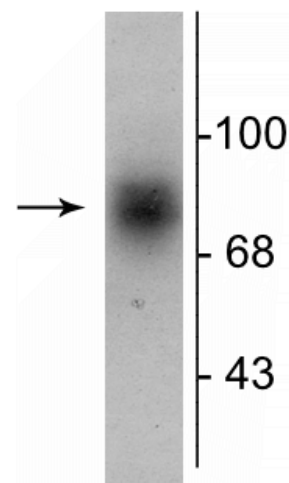
**Antibody Specificity:** Specific for endogenous levels of the ~88 kDa DAT protein.

**Purification Method:** Prepared from pooled rabbit serum by affinity purification using a column matrix to which the peptide immunogen was coupled.

**Quality Control Tests:** Western blots performed on each lot.

**Packaging:** 100 µl in 10 mM HEPES (pH 7.5), 150 mM NaCl, 100 µg BSA per ml and 50% glycerol.

**Storage and Stability:** Shipped on blue ice. 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.



Western blot of human striatal lysate showing specific immunolabeling of the ~88 kDa DAT protein.

### Product Specific References:

Sarkar, S., Gough, B., Raymick, J., Beaudoin, M. A., Ali, S. F., Virmani, A., & Binienda, Z. K. (2015). Histopathological and electrophysiological indices of rotenone-evoked dopaminergic toxicity: Neuroprotective effects of acetyl-L-carnitine. *Neuroscience letters*, 606, 53-59.

Kish SJ, Kalasinsky KS, Derkach P, Schmunk GA, Guttman M, Ang L, Adams V, Furukawa Y, Haycock JW (2001) Striatal dopaminergic and serotonergic markers in human heroin users. *Neuropsychopharmacology* 24:561-567.

### General References:

Wilson JM, Kalasinsky KS, Levey AI, Bergeron C, Reiber G, Anthony RM, Schmunk GA, Shannak K, Haycock JW, Kish SJ (1996) Striatal dopamine nerve terminal markers in human, chronic methamphetamine users. *Nat Med* 2:699-703.

Zhu MY, Klimek V, Haycock JW, Ordway GA (2000) Quantitation of tyrosine hydroxylase protein in the locus coeruleus from postmortem human brain. *J Neurosci Meth* 99:37-44.

Zhu MY, Klimek V, Dilley GE, Haycock JW, Stockmeier C, Overholser JC, Meltzer HY, Ordway GA (1999) Elevated levels of tyrosine hydroxylase in the locus coeruleus in major depression. *Biol Psychiatry* 46:1275-1286.