



## DAT

Cat.No. 284 003; Polyclonal rabbit antibody, 50 µg specific antibody (lyophilized)

### Data Sheet

Reconstitution/ Storage	50 µg specific antibody, lyophilized. Affinity purified with the immunogen. Rabbit serum albumin was added for stabilization. For reconstitution add 50 µl H <sub>2</sub> O to get a 1mg/ml solution in PBS. Then aliquot and store at -20°C until use.
Applications	<b>WB:</b> not recommended <b>IP:</b> not tested yet <b>ICC:</b> 1 : 200 up to 1 : 500 <b>IHC:</b> 1 : 200 up to 1 : 500 <b>IHC-P/FFPE:</b> 1 : 500
Immunogen	Synthetic peptide corresponding to AA 7 to 22 from rat DAT (UniProt Id: P23977)
Reactivity	Reacts with: rat (P23977), mouse (Q01959). Other species not tested yet.
Specificity	Specific for DAT.

#### TO BE USED IN VITRO / FOR RESEARCH ONLY NOT TOXIC, NOT HAZARDOUS, NOT INFECTIOUS, NOT CONTAGIOUS

During neurotransmission neurotransmitters like GABA, glycine, glutamate, dopamine, etc. are released from synaptic vesicles into the synaptic cleft. The **dopamine active transporter (DAT)** translocates the neurotransmitter dopamine back into the cytoplasm of the neuron.

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### Selected References SYSY Antibodies

Molecular interrogation of hypothalamic organization reveals distinct dopamine neuronal subtypes. Romanov RA, Zeisel A, Bakker J, Girach F, Hellysaz A, Tomer R, Alpár A, Mulder J, Clotman F, Keimpema E, Hsueh B, et al. *Nature neuroscience* (2017) 20(2): 176-188. **IHC**

Dopamine is produced in the rat spinal cord and regulates micturition reflex after spinal cord injury. Hou S, Carson DM, Wu D, Klaw MC, Houlé JD, Tom VJ *Experimental neurology* (2016) 285(Pt B): 136-146. **IHC; tested species: rat**

### Selected General References

Prolonged high fat diet reduces dopamine reuptake without altering DAT gene expression. Cone JJ, Chartoff EH, Potter DN, Ebner SR, Roitman MF *PloS one* (2013) 8(3): e58251.

Physical and functional interaction between the dopamine transporter and the synaptic vesicle protein synaptogyrin-3. Egaña LA, Cuevas RA, Baust TB, Parra LA, Leak RK, Hochendoner S, Peña K, Quiroz M, Hong WC, Dorostkar MM, Janz R, et al. *The Journal of neuroscience : the official journal of the Society for Neuroscience* (2009) 29(14): 4592-604.

The dopamine transporter is localized to dendritic and axonal plasma membranes of nigrostriatal dopaminergic neurons. Nirenberg MJ, Vaughan RA, Uhl GR, Kuhar MJ, Pickel VM *The Journal of neuroscience : the official journal of the Society for Neuroscience* (1996) 16(2): 436-47.

Dopamine transporter: biochemistry, pharmacology and imaging. Kuhar MJ, Sanchez-Roa PM, Wong DF, Dannals RF, Grigoriadis DE, Lew R, Milberger M *European neurology* (1990) 30 Suppl 1: 15-20.

[The dopamine transporter: characterization and physiopathologic implications]. Thibaut F, Vaugeois JM, Petit M *L'Encephale* () 21(6): 445-51.