

Datasheet for 600-401-X03**Dopamine Transporter Phospho T53 Antibody****Overview**

Description:	Anti-Dopamine Transporter pT53 (RABBIT) Antibody - 600-401-X03
Item No.:	600-401-X03
Size:	100 µL
Applications:	WB
Reactivity:	Rat
Host Species:	Rabbit

Product Details

Background:	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. Levels of DAT protein expression are altered by chronic drug administration. It has been shown that phosphorylation at Thr53 directly affects dopamine influx and amphetamine-stimulated substrate efflux, indicating that the Thr53 residue plays a major role in transport activity. Dopamine pT53 Antibody is ideal for researchers interested in neuroscience research.
Synonyms:	Sodium-dependent dopamine transporter, DA transporter, DAT, Solute carrier family 6 member 3, Slc6a3
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	Slc6a3
Reactivity:	Rat
PTM Specificity:	Phosphorylation
Immunogen Type:	Conjugated Peptide

Immunogen:	Anti-Phospho-Thr53 Dopamine Transporter Antibody was produced in rabbits by repeated immunizations with a synthetic phospho-peptide corresponding to amino acid residues surrounding Thr53 of rat DAT conjugated to KLH.
Purity/Specificity:	Anti-Phospho-Thr53 Dopamine Transporter Antibody is directed against Dopamine Transporter protein phosphorylated at T53. The antibody was prepared from monospecific antiserum by immunoaffinity chromatography using phospho peptide coupled to agarose beads followed by solid phase adsorption(s) against non-phospho peptide and non-specific peptide to remove any unwanted reactivities. Assay by immunoelectrophoresis resulted in a single precipitin arc against anti-Rabbit Serum. This antibody is specific for phosphorylated Dopamine Transporter. Minimal reactivity occurs against non-phosphorylated Dopamine Transporter. Reactivity against Dopamine Transporter occurs from rat sources.
Relevant Links:	• UniProtKB - P23977 • GeneID - 24898 • NCBI - NP_036826.1

Application Details

Tested Applications:	WB
Application Note:	Anti-Dopamine Transporter pT53 Antibody is tested for Western Blots and is specific for the ~55 kDa glycosylated form of the DAT protein phosphorylated at Thr53. Relative mobility may vary depending on the state of glycosylation of the DAT protein. The antibody works best in lysates that have not been boiled prior to being run on an SDS-PAGE gel. Immunolabeling of the DAT band is blocked by preadsorption with the phospho-peptide used as antigen but not by the corresponding dephospho-peptide. Specific conditions for reactivity should be optimized by the end user.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:10,000
WB:	1:1000

Formulation

Physical State:	Liquid (sterile filtered)
Concentration:	Sufficient for 10 mini blots (total final volume 100 ml at 1:1000 dilution)
Buffer:	0.01 M HEPES, 0.15 M Sodium Chloride, pH 7.5
Preservative:	None
Stabilizer:	0.1 mg/ml Bovine Serum Albumin (BSA) - IgG and Protease free, 50% (v/v) Glycerol

Shipping & Handling

Shipping Condition:	Wet Ice
Storage Condition:	Store vial at -20° C prior to opening in undiluted aliquots. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. Dilute only prior to immediate use.
Expiration:	Expiration date is one (1) year from date of receipt.

Disclaimer

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