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phospho-Dopamine Transporter (Thr53) Rabbit pAb

Catalog # AP96872

Product Information

Application	WB
Primary Accession	Q61327
Other Accession	Q61327
Reactivity	Rat, Mouse
Predicted	Horse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	68805
Physical State	Liquid
Immunogen	KLH conjugated Synthesised phosphopeptide derived from mouse Dopamine Transporter around the phosphorylation site of Thr53
Epitope Specificity	PQ(p-T)PV
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Belongs to the sodium:neurotransmitter symporter (SNF) (TC 2.A.22) family. SLC6A3 subfamily.
SUBUNIT	Homooligomer; disulfide-linked. Interacts with PRKCABP and TGFB1I1. Interacts (via N-terminus) with SYNGR3 (via N-terminus). Interacts with SLC18A2.
DISEASE	Defects in SLC6A3 are the cause of dystonia-parkinsonism infantile (DYTPRI) [MIM:613135]. It is a neurodegenerative disorder characterized by infantile onset of parkinsonism and dystonia. Other neurologic features include global developmental delay, bradikinesia and pyramidal tract signs.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	This gene encodes a dopamine transporter which is a member of the sodium- and chloride-dependent neurotransmitter transporter family. The 3' UTR of this gene contains a 40 bp tandem repeat, referred to as a variable number tandem repeat or VNTR, which can be present in 3 to 11 copies. Variation in the number of repeats is associated with idiopathic epilepsy, attention-deficit hyperactivity disorder, dependence on alcohol and cocaine, susceptibility to Parkinson disease and protection against nicotine dependence.[provided by RefSeq, Nov 2009]

Additional Information

Gene ID	13162
Other Names	DAT; DAT1; PKDYS; PKDYS1; SC6A3_HUMAN; SLC6A3; DA transporter; Solute carrier family 6 member 3; SC6A3_MOUSE; SC6A3_RAT; solute carrier family 6 (neurotransmitter transporter, dopamine), member 3; dopamine transporter 1; solute carrier family 6 (neurotransmitter transporter), member 3;

	dopamine transporter; Sodium-dependent dopamine transporter; SLC6A3 | Dopamine Transporter (phospho-T53); p-Dopamine Transporter; phospho-Dopamine Transporter; p-SLC6A3; SLC6A3 | Dopamine Transporter (phospho-Thr53)
Dilution	WB=1:500-2000
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

Protein Information

Name	Slc6a3
Synonyms	Dat, Dat1
Function	Mediates sodium- and chloride-dependent transport of dopamine (PubMed:10375632, PubMed:12606774). Also mediates sodium- and chloride-dependent transport of norepinephrine (also known as noradrenaline) (By similarity). Regulator of light-dependent retinal hyaloid vessel regression, downstream of OPN5 signaling (PubMed:30936473).
Cellular Location	Cell membrane; Multi-pass membrane protein {ECO:0000250|UniProtKB:Q01959}. Cell projection, neuron projection {ECO:0000250|UniProtKB:P23977}. Cell projection, axon. Note=Localizes to neurite tips in neuronal cells (By similarity). Colocalizes with SEPTIN4 at axon terminals, especially at the varicosities (PubMed:17296554). {ECO:0000250|UniProtKB:P23977, ECO:0000269|PubMed:17296554}
Tissue Location	Found in the substantia nigra and ventral tegmental dopamine neurons, in fibers of the medial forebrain bundle ascending into the striatum, and within dense fiber networks and varicosities in the dorsal and ventral striatum (at protein level) (PubMed:17296554, PubMed:19357284). Lower expression in the cortex (at protein level) (PubMed:19357284). Absent from the corpus callosum (PubMed:19357284) Expressed throughout the retina at postnatal day 8 (PubMed:30936473)

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