ARG52265
anti-Dopamine Transporter phospho (Thr53) antibody

Package: 50 µl
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes Dopamine Transporter phospho (Thr53)
Tested Reactivity	Rat
Tested Application	IHC-P, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	Dopamine Transporter
Species	Rat
Immunogen	Synthetic phospho-peptide corresponding to amino acid residues surrounding Thr53 conjugated to KLH
Conjugation	Un-conjugated
Alternate Names	PKDYS; Sodium-dependent dopamine transporter; Solute carrier family 6 member 3; DAT1; DAT; DA transporter

Application Instructions

Application table

Application	Dilution
IHC-P	Assay-dependent
WB	1:1,000

Application Note

Specific for the ~55k 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.
* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

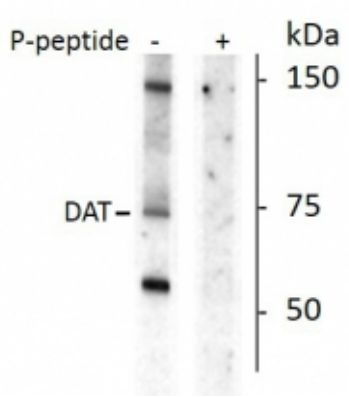
Properties

Form	Liquid
Purification	Affinity Purified
Buffer	10 mM HEPES (pH 7.5), 150 mM NaCl, 0.1 mg/ml BSA and 50% Glycerol
Stabilizer	0.1 mg/ml BSA, 50% Glycerol
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Database links	GeneID: 24898 Rat Swiss-port # P23977 Rat
Gene Symbol	SLC6A3
Gene Full Name	solute carrier family 6 (neurotransmitter transporter), member 3
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 (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). 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 (Foster et al., 2012).
Highlight	Related Antibody Duos and Panels: ARG30102 Phospho Dopamine Transporter Antibody Duo (Total, pT53) Related products: Dopamine Transporter antibodies; Dopamine Transporter Duos / Panels; Anti-Rabbit IgG secondary antibodies;
Research Area	Neuroscience antibody
Calculated Mw	68 kDa

Images



ARG52265 anti-Dopamine Transporter phospho (Thr53) antibody WB image

Western blot: Rat caudate lysate with (lane 2) or without (lane 1) phospho-peptide stained with ARG52265 anti-Dopamine Transporter phospho (Thr53) antibody.