Datasheet for ABIN7043741

anti-SLC6A3 antibody (Extracellular) (FITC)

2 Images

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Overview

Quantity:	50 µL
Target:	SLC6A3
Binding Specificity:	AA 191-205, Extracellular
Reactivity:	Rat
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This SLC6A3 antibody is conjugated to FITC
Application:	Flow Cytometry (FACS), Live Cell Imaging (LCI)

Product Details

Purpose:	A Rabbit Polyclonal Antibody to Dopamine Transporter (DAT) Conjugated to the Fluorescent Dye FITC
Immunogen:	Immunogen: Synthetic peptide Immunogen Sequence: (C)DAHASNSSDGLGLND, corresponding to amino acids residues 191-205 of rat DAT
Isotype:	IgG
Specificity:	2nd extracellular loop
Cross-Reactivity:	Mouse, Rat
Cross-Reactivity (Details):	Not recommended for use with human samples.
Predicted Reactivity:	Mouse - 14,15 amino acid residues identical

Product Details

Characteristics:	Anti-Dopamine Transporter (DAT) (extracellular) Antibody (ABIN7043740, ABIN7044606 and ABIN7044607) is a highly specific antibody directed against an epitope of the rat protein. The antibody can be used in western blot, immunohistochemistry, and live cell imaging applications. It has been designed to recognize DAT from mouse and rat samples. The antibody is unlikely to recognize DAT from human samples. \nAnti-Dopamine Transporter (DAT) (extracellular)-FITC Antibody (ABIN7043740, ABIN7044606 and ABIN7044607)-F) is directly conjugated to fluorescein isothiocyanate (FITC). The antibody can be used in immunofluorescent applications such as direct live cell flow cytometry.
Purification:	Affinity purified on immobilized antigen.

Target Details

Target:	SLC6A3
Alternative Name:	SLC6A3 (SLC6A3 Products)
Background:	Sodium-dependent dopamine transporter, DA transporter, Solute carrier family 6 member 3, SLC6A3,The Na+/Cl- transporter family SLC6, includes DAT, a monoamine transporter, important for regulating extracellular levels of dopamine. It does so by taking up dopamine from the synaptic cleft via the co-transport of Na+ and Cl- down their electrochemical gradients1. The removal of dopamine by DAT remains the most important means to control the extracellular lifetime of the neurotransmitter and notably, the ending of dopaminergic neurotransmission2. Transporters for serotonin, norepinephrine, GABA and glycine also belong to this family3.These receptors have 12 transmembrane spanning domains and intracellular N- and C-termini. DAT is also subject to post translational modifications such as phosphorylation, important for its regulation1. It also possesses a large extracellular domain which undergoes N-glycosylation, important for the proper targeting of the transporter to the plasma membrane1. DAT is expressed in dopaminergic cell bodies and terminals and can therefore serve as a marker for these neurons4. DAT is also expressed in the retina, gastrointestinal tract, lung, kidney, pancreas and lymphocytes2.DAT plays an important role in movement as well as reward, learning and memory5. Its malfunction, which leads to dopaminergic dysregulation, has been associated with ADHD, schizophrenia, as well as Parkinson's disease2. DAT is the main target for cocaine, amphetamine and methamphetamine psychostimulants, which mainly increase locomotor activities2. Alternative names: Dopamine Transporter (DAT), Sodium-dependent dopamine transporter, DA transporter, Solute carrier family 6 member 3, SLC6A3

Target Details

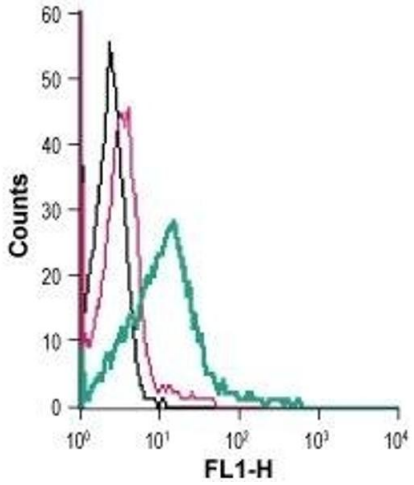
Gene ID:	24898
NCBI Accession:	NM_001044
UniProt:	P23977
Pathways:	Dopaminergic Neurogenesis

Application Details

Application Notes:	Antigen preadsorption control: 1 µg peptide per 1 µg antibody Application Dilutions Immunohistochemistry paraffin embedded sections ihc: N/A Application Dilutions Western blot wb: N/A
Comment:	Negative Control: (ABIN7582044) Blocking Peptide: (ABIN7237153)
Restrictions:	For Research Use only

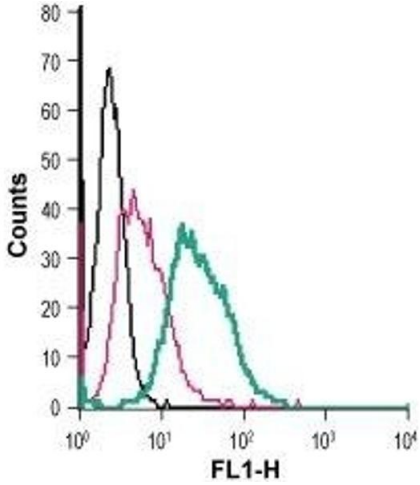
Handling

Format:	Lyophilized
Reconstitution:	50 µL double distilled water (DDW).
Concentration:	1 mg/mL
Buffer:	PBS pH 7.4, 1 % BSA with 0.05 % sodium azide
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	4 °C,-20 °C
Storage Comment:	Storage before reconstitution: The antibody ships as a lyophilized powder at room temperature. Upon arrival, it should be stored at -20°C. Storage after reconstitution: The reconstituted solution can be stored at 4°C, protected from the light, for up to 1 week. For longer periods, small aliquots should be stored at -20°C. Avoid multiple freezing and thawing. Centrifuge all antibody preparations before use (10000 x g 5 min).



Flow Cytometry

Image 1. Cell surface detection of DAT in mouse TK-1 T-cell lymphoma cells: (black line) Cells.(red line) Cells + Rabbit IgG isotype control-FITC.(green line) Cells + Anti-Dopamine Transporter (DAT) (extracellular)-FITC Antibody (ABIN7043741, ABIN7045581, ABIN7045582 and ABIN7045583), (5 µg).



Flow Cytometry

Image 2. Cell surface detection of DAT in mouse J774 macrophages: (black line) Cells.(red line) Cells + Rabbit IgG isotype control-FITC.(green line) Cells + Anti-Dopamine Transporter (DAT) (extracellular)-FITC Antibody (ABIN7043741, ABIN7045581, ABIN7045582 and ABIN7045583), (5 µg).