

## **Product datasheet for TA336930**

## OriGene Technologies, Inc.

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## Dopamine Transporter (SLC6A3) Mouse Monoclonal Antibody [Clone ID: mAb16]

**Product data:** 

**Product Type:** Primary Antibodies

Clone Name: mAb16

**Applications:** ELISA, ICC/IF, IHC, IP, WB

Recommended Dilution: Immunoprecipitation, Immunohistochemistry-Paraffin: 1:100, ELISA, Immunohistochemistry:

1:100, Immunocytochemistry/ Immunofluorescence: 1:250, Western Blot: 1:1000

**Reactivity:** Mouse, Rat (Does not react with: Human)

Host: Mouse Isotype: IgG1

Clonality: Monoclonal

Immunogen: Synthetic peptide corresponding to the N-terminus of rat DAT1. [UniProt# P23977]

Formulation: PBS containing 0.05% BSA, 0.05% Sodium Azide. Store at 4C short term. Aliquot and store at -

20C long term. Avoid freeze-thaw cycles.

**Concentration:** lot specific

Purification: Protein G purified

Conjugation: Unconjugated

**Storage:** Store at -20°C as received.

**Stability:** Stable for 12 months from date of receipt.

**Gene Name:** solute carrier family 6 member 3

Database Link: NP 001035

Entrez Gene 13162 MouseEntrez Gene 24898 RatEntrez Gene 6531 Human

Q01959





Background:

DAT1, also known as SLC6A3 and Sodium-dependent dopamine transporter, is a sodium and chloride-dependent dopamine transporter belonging to the solute carrier family 6. Dopamine transporters are distributed widely across the brain in regions with high dopaminergic activity, such as the striatum and substantia nigra. These transporters effectively provide fast acting clearance of dopamine, adrenalin and noradrenalin from the synaptic cleft, thus terminating the neurotransmitter signal. DATs have been found to interact with PRKCABP, TGFB1I1, SLC18A2 and the N-terminus of SYNGR3. DATs are also the target proteins for psychomotor stimulants such as amphetamines and cocaine. Research has implicated DATs as useful markers in detecting depression, schizophrenia, Parkinson's disease and drug abuse (Kish et al., 2001; Zhu et al., 2000; Zhu et al., 1999).

**Synonyms:** DAT; DAT1; PKDYS

Note: This DAT1 (mAb16) antibody is useful for Western blot,

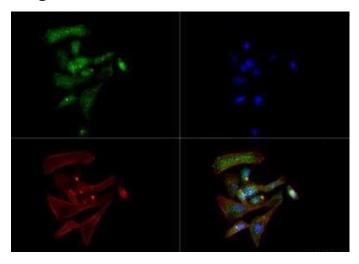
Immunocytochemistry/Immunofluorescence, Immunohistochemistry on paraffin-embedded sections and ELISA. In WB a band can been seen at  $\sim$ 70-85 kDa. Use in Immunoprecipitation

reported in scientific literature (PMID: 20643191).

**Protein Families:** Druggable Genome, Transmembrane

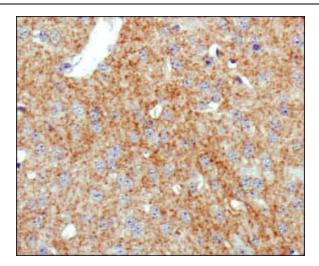
**Protein Pathways:** Parkinson's disease

## **Product images:**



Immunocytochemistry/Immunofluorescence: DAT1 Antibody (mAb16) TA336930 - The DAT1 antibody was tested in PC12 cells at a 1:250 dilution against DyLight 488 (Green). Actin and nuclei were counterstained with Phalloidin-AlexaFluor 568 (Red) and DAPI (Blue), respectively.





Immunohistochemistry-Paraffin: DAT1 Antibody (mAb16) TA336930 - IHC analysis of DAT1 in mouse brain using DAB with hematoxylin counterstain.



Western Blot: DAT1 Antibody (mAb16) TA336930 - Analysis of DAT1 expression in rat striatal membrane tissue lysate.