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Product datasheet

Anti-Dopamine Transporter antibody [6V-23-23] ab128848

★★★☆☆ **2 Abreviews**   **4 References**   4 Images

Overview

Product name	Anti-Dopamine Transporter antibody [6V-23-23]
Description	Mouse monoclonal [6V-23-23] to Dopamine Transporter
Host species	Mouse
Specificity	Not suitable for rat IHC-P.
Tested applications	**Suitable for:** WB, IHC-P
Species reactivity	**Reacts with:** Mouse, Rat **Does not react with:** Human
Immunogen	Synthetic peptide corresponding to Rat Dopamine Transporter (N terminal).
Positive control	In western blot, this antibody gave a positive signal in mouse and rat forebrain tissue lysates, and in rat brain striatal lysate.
General notes	This antibody clone is manufactured by Abcam. If you require a custom buffer formulation or conjugation for your experiments, please contact **orders@abcam.com**. The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing. If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.40 Preservative: 0.02% Sodium azide Constituents: PBS, 6.97% L-Arginine
Purity	Protein G purified
Clonality	Monoclonal

| Clone number	6V-23-23
Isotype	IgG1
Light chain type	kappa

Applications

The Abpromise guarantee   Our **Abpromise guarantee** covers the use of ab128848 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		Use a concentration of 5 µg/ml. Detects a band of approximately 69 kDa (predicted molecular weight: 69 kDa).
IHC-P	★★★☆☆ (2)	1/500.

Target

Function	Amine transporter. Terminates the action of dopamine by its high affinity sodium-dependent reuptake into presynaptic terminals.
Involvement in 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.
Sequence similarities	Belongs to the sodium:neurotransmitter symporter (SNF) (TC 2.A.22) family. SLC6A3 subfamily.
Cellular localization	Membrane.

Images
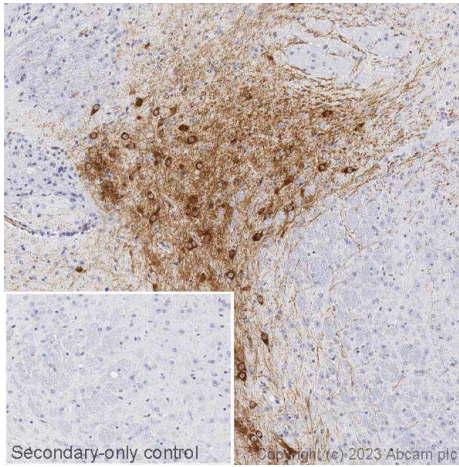
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Dopamine Transporter antibody [6V-23-23] (ab128848)

IHC image of Dopamine Transporter staining in a section of formalin-fixed paraffin-embedded mouse brain performed on a Leica Biosystems BOND® RX instrument. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH6, epitope retrieval solution 1) for 20mins. The section was then incubated with ab128848, 5ug/ml, for 15 mins at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX. The inset secondary-only control image is taken from an identical assay without primary antibody.

For other IHC staining systems (automated and non-automated) customers should optimize variable parameters such as antigen retrieval conditions, primary antibody concentration and antibody incubation times.


Immunohistochemistry - Anti-Dopamine Transporter antibody [6V-23-23] (ab128848)

Anti-Dopamine Transporter antibody ab128848 was used with Tissue clearing kit – CUBIC (**ab316246**) and 3D Tissue Staining Kit – CUBIC (**ab316248**) to penetrate, stain and clear a whole mouse brain. White: nuclear staining, Purple: DAT.

Learn more about **tissue clearing kits, reagents, and protocols** designed to make it easier to stain whole brains and get more data from each valuable tissue sample.

For a whole mouse brain, we recommend starting with 5 ug of ab128848 and using a Fab fragment secondary antibody with 3.35 µg to create an antibody complex before 3D staining (see protocol for details). Additive A was used during the staining process.

The sample was imaged using a light-sheet microscopy

Western blot - Anti-Dopamine Transporter antibody [6V-23-23] (ab128848)
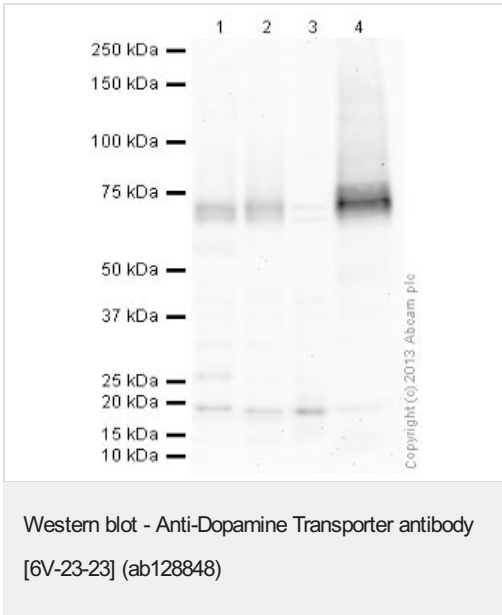
All lanes : Anti-Dopamine Transporter antibody [6V-23-23] (ab128848) at 5 µg/ml

Lane 1 : Forebrain (Mouse) Tissue Lysate

Lane 2 : Forebrain (Rat) Tissue Lysate

Lane 3 : Cerebellum (Rat) Tissue Lysate

Lane 4 : Brain (Rat) Striatal Tissue Lysate

Lysates/proteins at 20 µg per lane.

Secondary

All lanes : Goat Anti-Mouse IgG H&L (HRP) preadsorbed (**ab97040**) at 1/10000 dilution

Developed using the ECL technique.

Performed under reducing conditions.

Predicted band size: 69 kDa

Observed band size: 69 kDa

Additional bands at: 18 kDa. We are unsure as to the identity of these extra bands.

Exposure time: 20 minutes

This blot was produced using a 10% Bis-tris gel under the MOPS buffer system. The gel was run at 200V for 50 minutes before being transferred onto a Nitrocellulose membrane at 30V for 70 minutes. The membrane was then blocked for an hour using 5% Bovine Serum Albumin before being incubated with ab128848 overnight at 4°C. Antibody binding was detected using an anti-mouse antibody conjugated to HRP, and visualised using ECL development solution.

Rat cerebellum (lane 3) was included as a negative control. This tissue does not express dopamine transporter protein.
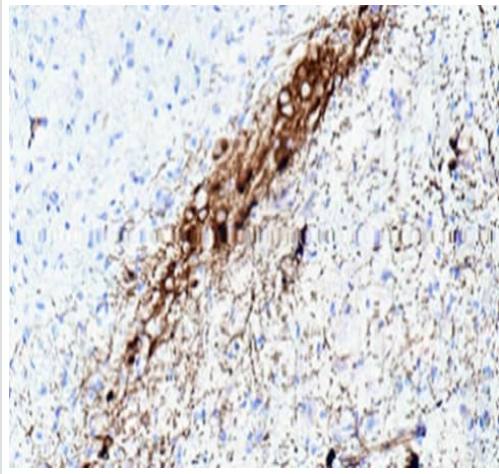
ab128848 staining of dopamine transporter in mouse brain (substantia nigra) tissue sections by Immunohistochemistry (IHC-P - paraformaldehyde-fixed, paraffin-embedded sections). Heat-mediated antigen retrieval was carried out using citric acid. Samples were incubated with primary antibody (1/500) for two hours at room temperature. A Biotin-conjugated goat anti-mouse IgG polyclonal was used as the secondary antibody.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Dopamine Transporter antibody [6V-23-23] (ab128848)

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