abcam

Product datasheet

Anti-ATP1A3 antibody [EPR14138] - BSA and Azide free ab250624

Recombinant RabMAb

3 Images

Overview

Product name	Anti-ATP1A3 antibody [EPR14138] - BSA and Azide free
Description	Rabbit monoclonal [EPR14138] to ATP1A3 - BSA and Azide free
Host species	Rabbit
Tested applications	**Suitable for:** IP, WB, ICC/IF
Species reactivity	**Reacts with:** Mouse, Rat **Predicted to work with:** Human
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
Positive control	ICC/IF: Mouse primary neuron cells WB: rat and mouse brain lysates, unboiled.
General notes	ab250624 is the carrier-free version of **ab182571**. Our **carrier-free** antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for increased conjugation efficiency. This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications. Use our **conjugation kits** for antibody conjugates that are ready-to-use in as little as 20 minutes with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold. This product is compatible with the Maxpar® Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar® is a trademark of Fluidigm Canada Inc. This product is a recombinant monoclonal antibody, which offers several advantages including: - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity - Long-term security of supply - Animal-free production For more information **see here**. Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb® patents**.

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C. Do Not Freeze.
Storage buffer	pH: 7.2 Constituent: PBS
Carrier free	Yes
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR14138
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab250624 in the following tested applications.

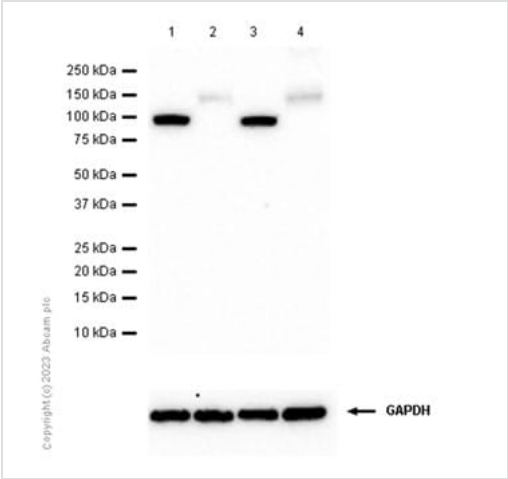
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
IP		Use at an assay dependent concentration.
WB		Use at an assay dependent concentration. Detects a band of approximately 100-150 kDa (predicted molecular weight: 111 kDa).
ICC/IF		Use at an assay dependent concentration.

Target

Function	This is the catalytic component of the active enzyme, which catalyzes the hydrolysis of ATP coupled with the exchange of sodium and potassium ions across the plasma membrane. This action creates the electrochemical gradient of sodium and potassium ions, providing the energy for active transport of various nutrients.
Involvement in disease	Dystonia 12 Alternating hemiplegia of childhood 2 Cerebellar ataxia, areflexia, pes cavus, optic atrophy, and sensorineural hearing loss
Sequence similarities	Belongs to the cation transport ATPase (P-type) (TC 3.A.3) family. Type IIC subfamily.
Cellular localization	Cell membrane.

Images



Western blot - Anti-ATP1A3 antibody [EPR14138] - BSA and Azide free (ab250624)

All lanes : Anti-ATP1A3 antibody [EPR14138] (**ab182571**) at 1/1000 dilution

Lane 1 : Mouse brain lysate, unboiled
Lane 2 : Mouse brain lysate, boiled
Lane 3 : Rat brain lysate, unboiled
Lane 4 : Rat brain lysate, boiled

Lysates/proteins at 20 µg per lane.

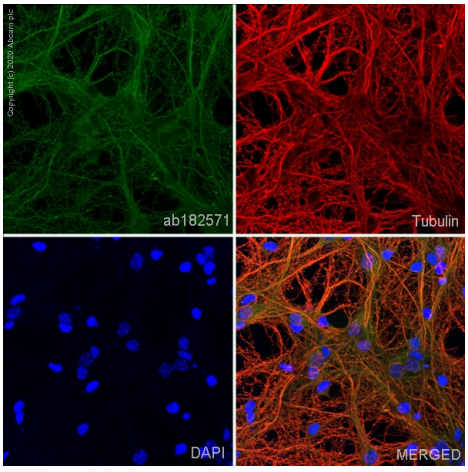
Secondary
All lanes : Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/20000 dilution

Predicted band size: 111 kDa
Observed band size: 102 kDa

Exposure time: 3 seconds

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab182571**).

Blocking and diluting buffer and concentration:5% NFDM/TBST.



Immunocytochemistry/ Immunofluorescence - Anti-ATP1A3 antibody [EPR14138] - BSA and Azide free (ab250624)

Immunocytochemistry/ Immunofluorescence analysis of mouse primary neuron cells labeling ATP1A3 with purified **ab182571** at 1/50 (5.2 µg/mL). Cells were fixed in 4% paraformaldehyde and permeabilized with 0.1% Triton X-100. Cells were counterstained with **ab195889** Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) 1/200 (2.5 µg/mL). Goat anti rabbit IgG (Alexa Fluor® 488, **ab150077**) was used as the secondary antibody at 1/1000 (2 µg/mL) dilution. DAPI (blue) was used as nuclear counterstain. PBS instead of the primary antibody was used as the secondary antibody only control.
Confocal scanning Z step was set as 0.3 µm followed by image processing with maximum Z projection.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab182571**).

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