abcam

Product datasheet

Anti-ATP1A3 antibody [EPR14137] - N-terminal ab182572

Recombinant RabMAb

1 Abreviews 1 References 4 Images

Overview

Product name	Anti-ATP1A3 antibody [EPR14137] - N-terminal
Description	Rabbit monoclonal [EPR14137] to ATP1A3 - N-terminal
Host species	Rabbit
Tested applications	**Suitable for:** IP, WB **Unsuitable for:** ICC/IF
Species reactivity	**Reacts with:** Mouse, Rat, Human
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
Positive control	WB: Mouse and rat brain lysate. Human cerebellum lysate IP: Human brain lysate.
General notes	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 short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.2 Preservative: 0.01% Sodium azide Constituents: 59% PBS, 0.05% BSA, 40% Glycerol (glycerin, glycerine)
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR14137

Isotype IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab182572 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		1/30.
WB		1/1000 - 1/10000. Detects a band of approximately 100-150 kDa (predicted molecular weight: 111 kDa).

Application notes Is unsuitable for ICC/IF.

Target

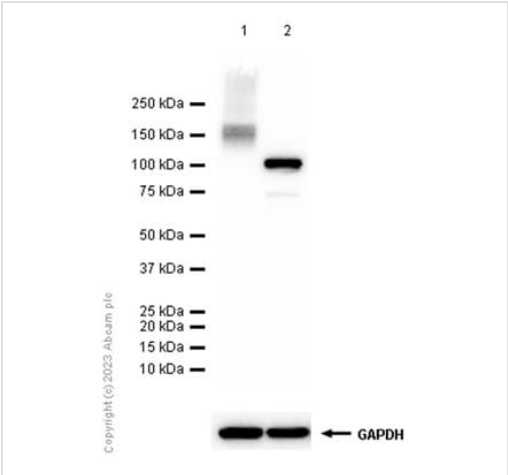
Function This is the catalytic component of the active enzyme, which catalyzes the hydrolysis of ATP coupled with the exchange of sodium and potassium ions across the plasma membrane. This action creates the electrochemical gradient of sodium and potassium ions, providing the energy for active transport 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 [EPR14137] - N-terminal (ab182572)

All lanes : Anti-ATP1A3 antibody [EPR14137] - N-terminal (ab182572) at 1/1000 dilution

Lane 1 : Human cerebellum lysate boiled
Lane 2 : Human cerebellum lysate unboiled

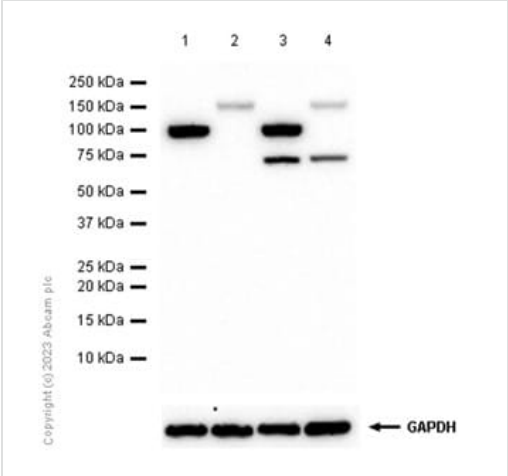
Lysates/proteins at 20 µg per lane.

Secondary
All lanes : Goat Anti-Rabbit IgG (HRP) with minimal cross-reactivity with human IgG at 1/2000 dilution

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

Exposure time: 1 second

Blocking and diluting buffer: 5% NFDM/TBST



Western blot - Anti-ATP1A3 antibody [EPR14137] - N-terminal (ab182572)

All lanes : Anti-ATP1A3 antibody [EPR14137] - N-terminal (ab182572) at 1/2000 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

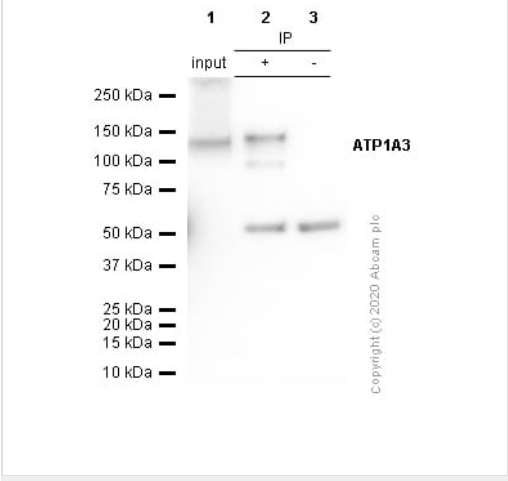
Lysates/proteins at 20 µg per lane.

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: 5 seconds

Blocking and diluting buffer: 5% NFDM/TBST



Immunoprecipitation - Anti-ATP1A3 antibody [EPR14137] - N-terminal (ab182572)

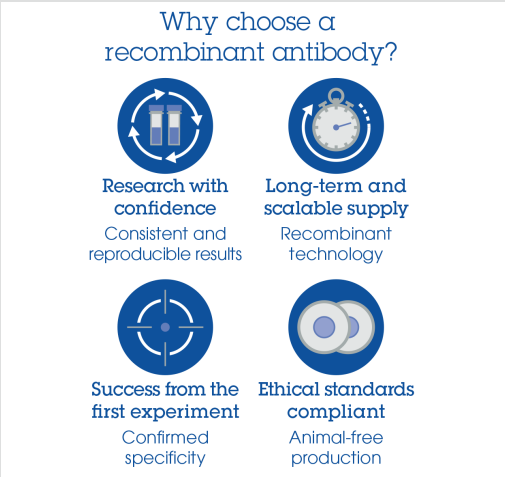
ATP1A3 was immunoprecipitated from 0.35 mg human brain lysate 10 ug with ab182572 at 1/30 dilution (2ug in 0.35mg lysates). Western blot was performed on the immunoprecipitate using ab182572 at 1/1000 dilution. VeriBlot for IP Detection Reagent (HRP)(**ab131366**) was used at 1/5000 dilution.
Lane 1: human brain lysate 10 ug

Lane 2: ab182572 IP in human brain lysate

Lane 3: Rabbit monoclonal IgG (**ab172730**) instead of ab182572 in human brain lysate

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

Exposure time: 5 seconds



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(ab182572)

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