abcam

Product datasheet

HRP Anti-Sodium Potassium ATPase antibody [EP1845Y] - Plasma Membrane Loading Control ab185065

Recombinant RabMAb

8 References 5 Images

Overview

Product name	HRP Anti-Sodium Potassium ATPase antibody [EP1845Y] - Plasma Membrane Loading Control
Description	HRP Rabbit monoclonal [EP1845Y] to Sodium Potassium ATPase - Plasma Membrane Loading Control
Host species	Rabbit
Conjugation	HRP
Tested applications	**Suitable for:** IHC-P, WB
Species reactivity	**Reacts with:** Mouse, Rat, Human **Predicted to work with:** Tilapia
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
Positive control	This antibody gave a positive signal in human stomach carcinoma tissue lysate as well as the following whole cell lysates: HeLa; HEK293 IHC: Human brain (cerebral cortex), rat brain and mouse brain.
General notes	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. Avoid freeze / thaw cycle. Store In the Dark.
Storage buffer	pH: 7.40 Preservative: 0.1% 10% Proclin 300 Solution Constituents: PBS, 1% BSA, 30% Glycerol (glycerin, glycerine)
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EP1845Y
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab185065 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
IHC-P		Use a concentration of 1 µg/ml. Perform heat mediated antigen retrieval before commencing with IHC staining protocol. **ab199507** - Rabbit monoclonal IgG (HRP), is suitable for use an as isotype control with this antibody.
WB		1/5000. Predicted molecular weight: 113 kDa.

Target

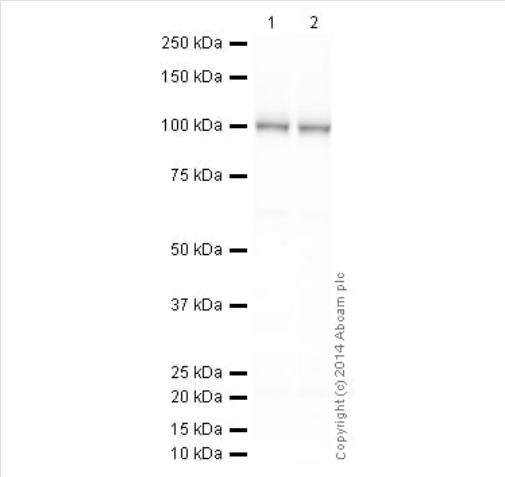
Function This is the catalytic component of the active enzyme, which catalyzes the hydrolysis of ATP coupled with the exchange of sodium and potassium ions across the plasma membrane. This action creates the electrochemical gradient of sodium and potassium ions, providing the energy for active transport of various nutrients.

Sequence similarities Belongs to the cation transport ATPase (P-type) (TC 3.A.3) family. Type IIC subfamily.

Post-translational modifications Phosphorylation on Tyr-10 modulates pumping activity.

Cellular localization Cell membrane. Melanosome. Identified by mass spectrometry in melanosome fractions from stage I to stage IV.

Images



Western blot - HRP Anti-Sodium Potassium ATPase antibody [EP1845Y] - Plasma Membrane Loading Control (ab185065)

All lanes : HRP Anti-Sodium Potassium ATPase antibody [EP1845Y] - Plasma Membrane Loading Control (ab185065) at 1/5000 dilution (Milk blocking 3%)

Lane 1 : HeLa whole cell lysate (**ab150035**)
Lane 2 : HEK293 (Human embryonic kidney cell line) Whole Cell Lysate

Lysates/proteins at 10 µg per lane.

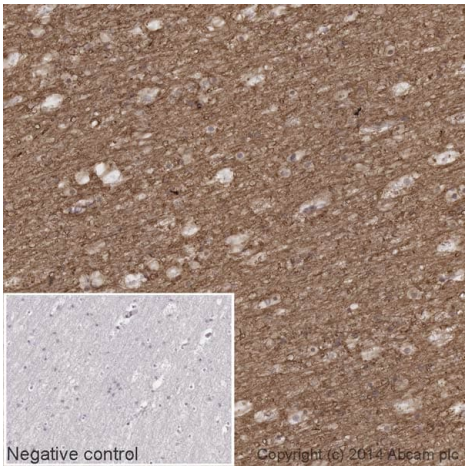
Developed using the ECL technique.

Performed under reducing conditions.

Predicted band size: 113 kDa
Observed band size: 100 kDa

Exposure time: 30 seconds

This blot was produced using a 4-12% 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 3% milk before being incubated with ab185065 overnight at 4°C. Antibody binding was visualised using ECL development solution **ab133406**.

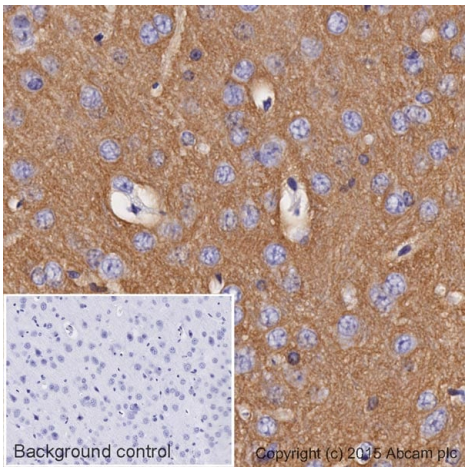


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - HRP Anti-Sodium Potassium ATPase antibody [EP1845Y] - Plasma Membrane Loading Control (ab185065)

IHC image of Sodium Potassium ATPase staining in a section of formalin-fixed paraffin-embedded Human brain (cerebral cortex). The section was pre-treated using pressure cooker heat mediated antigen retrieval with sodium citrate buffer (pH6) for 30mins. The section was incubated with ab185065, 1µg/ml overnight at +4°C. The section was counterstained with haematoxylin and mounted with DPX.

The inset negative 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.

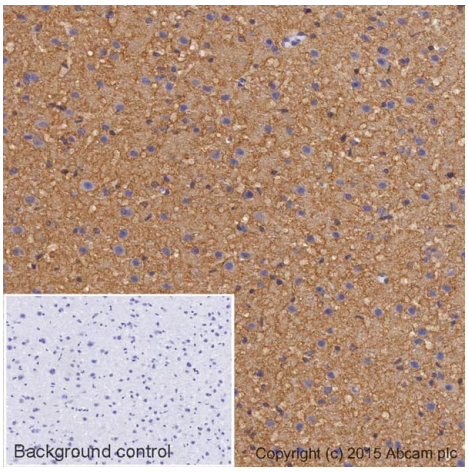


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - HRP Anti-Sodium Potassium ATPase antibody [EP1845Y] - Plasma Membrane Loading Control (ab185065)

IHC image of Sodium Potassium ATPase staining in a section of formalin-fixed paraffin-embedded normal mouse brain, performed on a Leica BOND™. 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 ab185065, 1/100 dilution, for 15 mins at room temperature. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

The inset background 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 (Formalin/PFA-fixed paraffin-embedded sections) - HRP Anti-Sodium Potassium ATPase antibody [EP1845Y] - Plasma Membrane Loading Control (ab185065)

IHC image of Sodium Potassium ATPase staining in a section of formalin-fixed paraffin-embedded normal rat brain, performed on a Leica BOND™. 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 ab185065, 1/100 dilution, for 15 mins at room temperature. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

The inset background 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.

HRP Anti-Sodium Potassium ATPase antibody [EP1845Y] - Plasma Membrane Loading Control (ab185065)

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