# abcam

## Product datasheet

# Anti-alpha 1 Sodium Potassium ATPase antibody [464.6] - BSA and Azide free ab237969

1 References 5 图像

概述

产品名称 Anti-alpha 1 Sodium Potassium ATPase抗体[464.6] - BSA and Azide free

**描述** 小鼠单克隆抗体[464.6] to alpha 1 Sodium Potassium ATPase - BSA and Azide free

宿主 Mouse

经测试应用 适用于: ICC/IF, IHC-P, WB

**种属反应性 与反应:** Mouse, Rat, Rabbit, Human, Pig

预测可用于: Sheep, Dog, Xenopus laevis, Monkey \_\_\_\_\_\_

免疫原 Full length native protein (purified) corresponding to Rabbit alpha 1 Sodium Potassium ATPase.

Rabbit renal outermedulla.

阳性对照 This antibody gave a positive signal in HEK293 whole cell lysate and in the following tissue

lysates: human kidney, rabbit heart, human brain and human brain membrane. This antibody also

gave a positive signal in Porcine proximal tubule lysate.

常规说明 This data was developed using the same antibody clone in a different buffer formulation

containing PBS, L-arginine, and sodium azide (ab237969).

This antibody clone [464.6] is manufactured by Abcam.

If you require this antibody in a different buffer formulation or a different conjugate for your experiments, please contact **orders@abcam.com** or you can find further information **here**.

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

性能

形式 Liquid

**存放说明** Shipped at 4°C. Store at +4°C. Do Not Freeze.

存储溶液 Constituent: PBS

1

**无载体** 是

纯**度** lgG fraction

**克隆** 单克隆

**克隆编号** 464.6

同种型 lgG1

轻链类型 kappa

# 应用

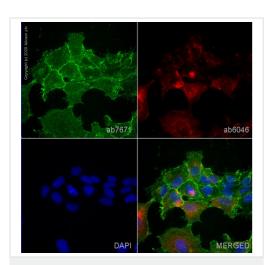
The Abpromise guarantee Abpromise™承诺保证使用ab237969于以下的经测试应用

"应用说明"部分下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

应用	Ab评论	说明
ICC/IF		Use at an assay dependent concentration.
IHC-P		Use a concentration of 5 µg/ml.
WB		Use a concentration of 1 - 5 μg/ml. Predicted molecular weight: 113 kDa.  Abcam recommends using 5% BSA as the blocking agent.

靶标	
功能	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.
序列相似性	Belongs to the cation transport ATPase (P-type) (TC 3.A.3) family. Type IIC subfamily.
翻译后修饰	Phosphorylation on Tyr-10 modulates pumping activity.
细 <b>胞定位</b>	Cell membrane. Melanosome. Identified by mass spectrometry in melanosome fractions from stage I to stage IV.

# 图片



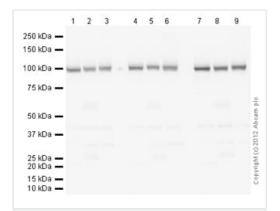
Immunocytochemistry/ Immunofluorescence - Antialpha 1 Sodium Potassium ATPase antibody [464.6] - BSA and Azide free (ab237969)

This data was developed using the same antibody clone in a different buffer formulation containing PBS and sodium azide (ab7671)

ab7671 staining alpha 1 Sodium Potassium ATPase in Hek293 cells. The cells were fixed with 100% methanol (5 min), permeabilized with 0.1% PBS-Tween for 5 minutes and then blocked with 1% BSA/10% normal goat serum/0.3M glycine in 0.1%PBS-Tween for 1h. The cells were then incubated overnight at 4°C with ab7671 at 1?g/ml and ab6046, Rabbit polyclonal to beta Tubulin - Loading Control. Cells were then incubated with ab150117, Goat polyclonal Secondary Antibody to Mouse IgG H&L (Alexa Fluor® 488) preadsorbed at 1/1000 dilution (shown in green) and ab150080, Goat polyclonal Secondary Antibody to Rabbit IgG - H&L (Alexa Fluor® 594) at 1/1000 dilution (shown in pseudocolour red). Nuclear DNA was labelled with DAPI (shown in blue).

Also suitable in cells fixed with 100% methanol (5 min).

Image was acquired with a high-content analyser (Operetta CLS, Perkin Elmer) and a single confocal section is shown.



Western blot - Anti-alpha 1 Sodium Potassium ATPase antibody [464.6] - BSA and Azide free (ab237969)

**Lanes 1-3 :** Anti-alpha 1 Sodium Potassium ATPase antibody [464.6] (ab7671) at 1  $\mu$ g/ml

**Lanes 4-6 :** Anti-alpha 1 Sodium Potassium ATPase antibody [464.6] (ab7671) at 2  $\mu$ g/ml

**Lanes 7-9 :** Anti-alpha 1 Sodium Potassium ATPase antibody [464.6] (ab7671) at 5  $\mu$ g/ml

Lanes 1 & 4 & 7 : <u>ab29466</u> Lanes 2 & 5 & 8 : <u>ab27253</u> Lanes 3 & 6 & 9 : ab7942

Lysates/proteins at 20 µg per lane.

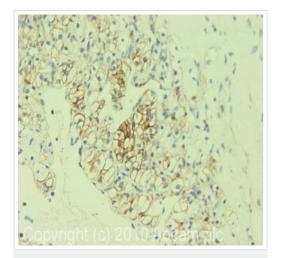
Developed using the ECL technique.

Performed under reducing conditions.

Predicted band size: 113 kDa

Exposure time: 3 minutes

This data was developed using the same antibody clone in a different buffer formulation containing PBS, L-Arginine and sodium azide (ab7671).



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-alpha 1 Sodium
Potassium ATPase antibody [464.6] - BSA and
Azide free (ab237969)

IHC image of Ab7671 staining in Human Kidney Carcinoma formalin fixed paraffin embedded tissue section, performed on a Leica Bond TM system using the standard protocol F. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH6, epitope retrieval solution 1) for 20 mins. The section was then incubated with Ab7671, 5µg/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.

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.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, L-Arginine and sodium azide (ab7671).



Western blot - Anti-alpha 1 Sodium Potassium ATPase antibody [464.6] - BSA and Azide free (ab237969) **All lanes :** Anti-alpha 1 Sodium Potassium ATPase antibody [464.6] (**ab7671**) at 10 μg/ml

Lane 1 : HEK293 (Human embryonic kidney cell line) Whole Cell

Lysate

Lane 2 : <u>ab30203</u> Lane 3 : <u>ab29072</u> Lane 4 : <u>ab29466</u>

Lane 5: Brain (Human) Membrane Lysate - adult normal tissue

Lysates/proteins at 20 µg per lane.

#### Secondary

**All lanes :** Goat polyclonal to Mouse IgG - H&L - Pre-Adsorbed (HRP), at 1/3000 dilution

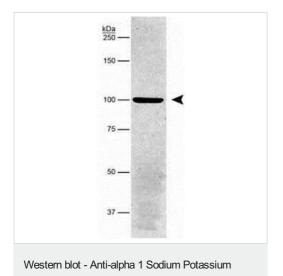
Developed using the ECL technique.

Performed under reducing conditions.

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

Exposure time: 3 minutes

This data was developed using the same antibody clone in a different buffer formulation containing PBS, L-Arginine and sodium azide (ab7671).



ATPase antibody [464.6] - BSA and Azide free

(ab237969)

Anti-alpha 1 Sodium Potassium ATPase antibody [464.6] (**ab7671**) at 1/5000 dilution + Porcine proximal tubule lysate

Predicted band size: 113 kDa

Western blot analysis detecting Na, K-ATP-ase (alpha) in porcine proximal tubule protein, using Ab7671. Band is at 112 kDa.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, L-Arginine and sodium azide (ab7671).

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