

Na⁺/K⁺-ATPase Rabbit mAb

Catalog No.: A11683 Recombinant 17 Publications

Basic Information

Observed MW

100kDa

Calculated MW

113kDa

Category

Primary antibody

Applications

WB, IF/ICC, IF-P, IHC-P, ELISA

Cross-Reactivity

Human, Mouse, Rat

Clone/No. number

ARC0674

Background

The protein encoded by this gene belongs to the family of P-type cation transport ATPases, and to the subfamily of Na⁺/K⁺-ATPases. Na⁺/K⁺-ATPase is an integral membrane protein responsible for establishing and maintaining the electrochemical gradients of Na and K ions across the plasma membrane. These gradients are essential for osmoregulation, for sodium-coupled transport of a variety of organic and inorganic molecules, and for electrical excitability of nerve and muscle. This enzyme is composed of two subunits, a large catalytic subunit (alpha) and a smaller glycoprotein subunit (beta). The catalytic subunit of Na⁺/K⁺-ATPase is encoded by multiple genes. This gene encodes an alpha 1 subunit. Multiple transcript variants encoding different isoforms have been found for this gene.

Recommended Dilutions

| | |
|--------|--|
| WB | 1:50000 - 1:200000 |
| IF/ICC | 1:100 - 1:1000 |
| IF-P | 1:100 - 1:1000 |
| IHC-P | 1:3000 - 1:12000 |
| ELISA | Recommended starting concentration is 1 µg/mL. Please optimize the concentration based on your specific assay requirements. |

Immunogen Information

Gene ID

476

Swiss Prot

P05023

Immunogen

Synthetic peptide. This information is considered to be commercially sensitive.

Synonyms

CMT2DD; HOMGSMR2; Na⁺/K⁺-ATPase

Contact

| | |
|--|--|
|  | 400-999-6126 |
|  | cn.market@abclonal.com.cn |
|  | www.abclonal.com.cn |

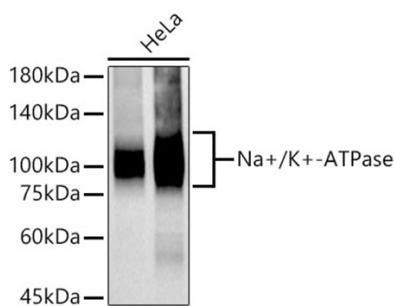
Product Information

| Source | Isotype | Purification |
|----------------|---------|-----------------------|
| Rabbit | IgG | Affinity purification |
| Storage | | |

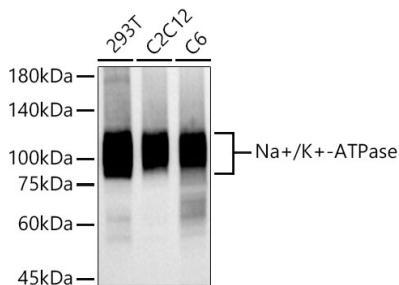
Store at -20°C. Avoid freeze / thaw cycles.

Buffer: PBS with 0.09% sodium azide, 0.05% BSA, 50% glycerol, pH7.3.

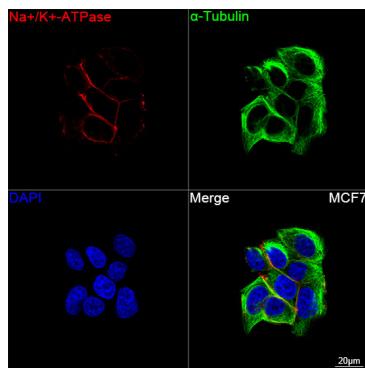
Validation Data



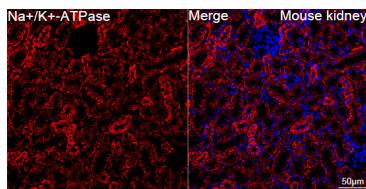
Western blot analysis of lysates from HeLa cells, using Na+/K+-ATPase Rabbit mAb (A11683) at 1:50000 dilution. Membrane protein extract isolated from HeLa cells. Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution. Lysates/proteins: 25 μ g per lane. Blocking buffer: 3% nonfat dry milk in TBST. Detection: ECL Basic Kit (RM00020). Exposure time: 30s.



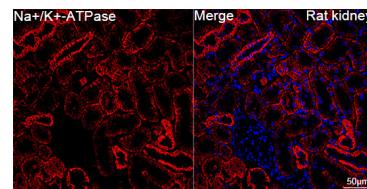
Western blot analysis of various lysates using Na+/K+-ATPase Rabbit mAb (A11683) at 1:50000 dilution incubated overnight at 4°C. Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution. Lysates/proteins: 25 μ g per lane. Blocking buffer: 3% nonfat dry milk in TBST. Detection: ECL Basic Kit (RM00020). Exposure time: 30s.



Confocal imaging of MCF7 cells using Na+/K+-ATPase Rabbit mAb (A11683, dilution 1:200) followed by a further incubation with Cy3 Goat Anti-Rabbit IgG (H+L) (AS007, dilution 1:500) (Red). The cells were counterstained with α -Tubulin Mouse mAb (AC012, dilution 1:400) followed by incubation with ABflo® 488-conjugated Goat Anti-Mouse IgG (H+L) Ab (AS076, dilution 1:500) (Green). DAPI was used for nuclear staining (Blue). Objective: 100x.

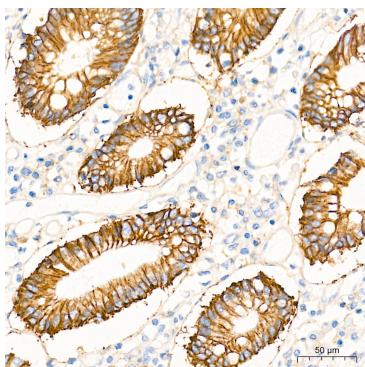


Confocal imaging of paraffin-embedded Mouse kidney tissue using Na+/K+-ATPase Rabbit mAb (A11683, dilution 1:200) followed by a further incubation with Cy3 Goat Anti-Rabbit IgG (H+L) (AS007, dilution 1:500) (Red). DAPI was used for nuclear staining (Blue). High pressure antigen retrieval performed with 0.01M Citrate Buffer (pH 6.0) prior to IF staining. Objective: 40x.

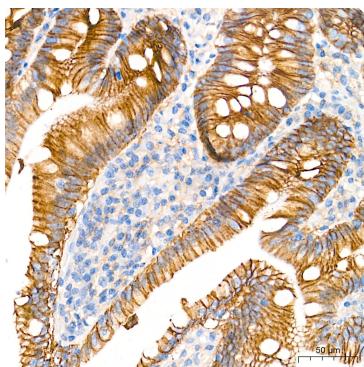


Confocal imaging of paraffin-embedded Rat kidney tissue using Na+/K+-ATPase Rabbit mAb (A11683, dilution 1:200) followed by a further incubation with Cy3 Goat Anti-Rabbit IgG (H+L) (AS007, dilution 1:500) (Red). DAPI was used for nuclear staining (Blue). High pressure antigen retrieval performed with 0.01M Citrate Buffer (pH 6.0) prior to IF staining. Objective: 40x.

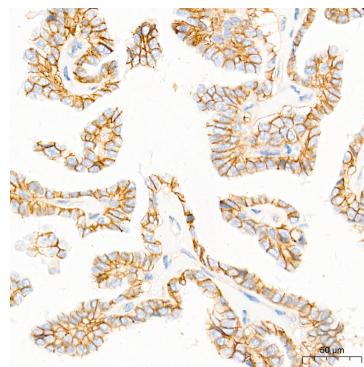
Validation Data



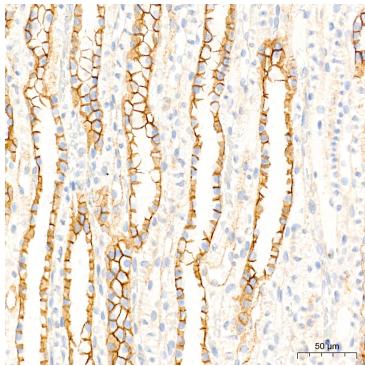
Immunohistochemistry analysis of paraffin-embedded Human colon tissue using Na⁺/K⁺-ATPase Rabbit mAb (A11683) at a dilution of 1:8000 (40x lens). High pressure antigen retrieval performed with 0.01M Tris-EDTA Buffer (pH 9.0) prior to IHC staining.



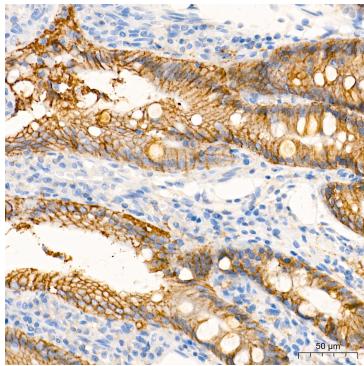
Immunohistochemistry analysis of paraffin-embedded Human small intestine tissue using Na⁺/K⁺-ATPase Rabbit mAb (A11683) at a dilution of 1:8000 (40x lens). High pressure antigen retrieval performed with 0.01M Tris-EDTA Buffer (pH 9.0) prior to IHC staining.



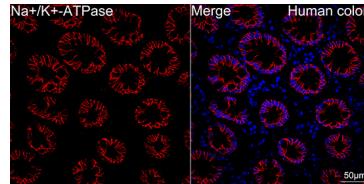
Immunohistochemistry analysis of paraffin-embedded Human thyroid cancer tissue using Na⁺/K⁺-ATPase Rabbit mAb (A11683) at a dilution of 1:8000 (40x lens). High pressure antigen retrieval performed with 0.01M Tris-EDTA Buffer (pH 9.0) prior to IHC staining.



Immunohistochemistry analysis of paraffin-embedded Mouse kidney tissue using Na⁺/K⁺-ATPase Rabbit mAb (A11683) at a dilution of 1:8000 (40x lens). High pressure antigen retrieval performed with 0.01M Tris-EDTA Buffer (pH 9.0) prior to IHC staining.



Immunohistochemistry analysis of paraffin-embedded Rat colon tissue using Na⁺/K⁺-ATPase Rabbit mAb (A11683) at a dilution of 1:8000 (40x lens). High pressure antigen retrieval performed with 0.01M Tris-EDTA Buffer (pH 9.0) prior to IHC staining.



Confocal imaging of paraffin-embedded Human colon tissue using Na⁺/K⁺-ATPase Rabbit mAb (A11683, dilution 1:200) followed by a further incubation with Cy3 Goat Anti-Rabbit IgG (H+L) (AS007, dilution 1:500) (Red). DAPI was used for nuclear staining (Blue). High pressure antigen retrieval performed with 0.01M Citrate Buffer (pH 6.0) prior to IF staining. Objective: 40x.