

## Anti-Sodium Potassium ATPase Antibody (1D444)

### Product Details

Ig Type:	IgG
Reactivity:	Human,Mouse,Rat
Molecular Weight:	Theoretical: 113 kDa. Actual: 110 kDa.
Clone:	1D444
Purification:	Protein A purified

### Applications

#### Verified Activity:

1. 25 ug total protein per lane of various lysates (see on figure) probed with Sodium Potassium ATPase monoclonal antibody, unconjugated (TMAB-13035) at 1:2000 dilution and 4°C overnight incubation. Followed by conjugated secondary antibody incubation at r. T. for 60 min.
2. 25 ug total protein per lane of various lysates (see on figure) probed with Sodium Potassium ATPase monoclonal antibody, unconjugated (TMAB-13035) at 1:20000 dilution and 4°C overnight incubation. Followed by conjugated secondary antibody incubation at r. T. for 60 min.
3. Paraformaldehyde-fixed, paraffin embedded Mouse Liver; Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15 min; Antibody incubation with Sodium Potassium ATPase Monoclonal Antibody, Unconjugated (TMAB-13035) at 1: 100overnight at 4°C, followed by conjugation to the SP Kit (Rabbit) and DAB staining.
4. Paraformaldehyde-fixed, paraffin embedded Mouse Colon; Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15 min; Antibody incubation with Sodium Potassium ATPase Monoclonal Antibody, Unconjugated (TMAB-13035) at 1: 100overnight at 4°C, followed by conjugation to the SP Kit (Rabbit) and DAB staining.
5. Paraformaldehyde-fixed, paraffin embedded Mouse Cerebrum; Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15 min; Antibody incubation with Sodium Potassium ATPase Monoclonal Antibody, Unconjugated (TMAB-13035) at 1: 100overnight at 4°C, followed by conjugation to the SP Kit (Rabbit) and DAB staining.
6. Paraformaldehyde-fixed, paraffin embedded Mouse Kidney; Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15 min; Antibody incubation with Sodium Potassium ATPase Monoclonal Antibody, Unconjugated (TMAB-13035) at 1: 100overnight at 4°C, followed by conjugation to the SP Kit (Rabbit) and DAB staining.
7. Paraformaldehyde-fixed, paraffin embedded Mouse Stomach; Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15 min; Antibody incubation with Sodium Potassium ATPase Monoclonal Antibody, Unconjugated (TMAB-13035) at 1: 100overnight at 4°C, followed by conjugation to the SP Kit (Rabbit) and DAB staining.
8. Paraformaldehyde-fixed, paraffin embedded Mouse Small Intestine; Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15 min; Antibody incubation with Sodium Potassium ATPase Monoclonal Antibody, Unconjugated (TMAB-13035) at 1: 100overnight at 4°C, followed by conjugation to the SP Kit (Rabbit) and DAB staining.
9. Paraformaldehyde-fixed, paraffin embedded Rat Liver; Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15 min; Antibody incubation with Sodium Potassium ATPase Monoclonal Antibody, Unconjugated (TMAB-13035) at 1: 100overnight at 4°C, followed by conjugation to the SP Kit (Rabbit) and DAB staining.
10. Paraformaldehyde-fixed, paraffin embedded Rat Colon; Antigen retrieval by boiling in

sodium citrate buffer (pH6.0) for 15 min; Antibody incubation with Sodium Potassium ATPase Monoclonal Antibody, Unconjugated (TMAB-13035) at 1: 100overnight at 4°C, followed by conjugation to the SP Kit (Rabbit) and DAB staining.

11. Paraformaldehyde-fixed, paraffin embedded Rat Cerebrum; Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15 min; Antibody incubation with Sodium Potassium ATPase Monoclonal Antibody, Unconjugated (TMAB-13035) at 1: 100overnight at 4°C, followed by conjugation to the SP Kit (Rabbit) and DAB staining.

12. Paraformaldehyde-fixed, paraffin embedded Rat Kidney; Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15 min; Antibody incubation with Sodium Potassium ATPase Monoclonal Antibody, Unconjugated (TMAB-13035) at 1: 100overnight at 4°C, followed by conjugation to the SP Kit (Rabbit) and DAB staining.

13. Paraformaldehyde-fixed, paraffin embedded Rat Stomach; Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15 min; Antibody incubation with Sodium Potassium ATPase Monoclonal Antibody, Unconjugated (TMAB-13035) at 1: 100overnight at 4°C, followed by conjugation to the SP Kit (Rabbit) and DAB staining.

14. Paraformaldehyde-fixed, paraffin embedded Rat Small Intestine; Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15 min; Antibody incubation with Sodium Potassium ATPase Monoclonal Antibody, Unconjugated (TMAB-13035) at 1: 100overnight at 4°C, followed by conjugation to the SP Kit (Rabbit) and DAB staining.

15. Paraformaldehyde-fixed, paraffin embedded Human Cervical Cancer; Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15 min; Antibody incubation with Sodium Potassium ATPase Monoclonal Antibody, Unconjugated (TMAB-13035) at 1: 100overnight at 4°C, followed by conjugation to the SP Kit (Rabbit) and DAB staining.

16. Paraformaldehyde-fixed, paraffin embedded Human Liver; Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15 min; Antibody incubation with Sodium Potassium ATPase Monoclonal Antibody, Unconjugated (TMAB-13035) at 1: 100overnight at 4°C, followed by conjugation to the SP Kit (Rabbit) and DAB staining.

17. Paraformaldehyde-fixed, paraffin embedded Human Colon; Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15 min; Antibody incubation with Sodium Potassium ATPase Monoclonal Antibody, Unconjugated (TMAB-13035) at 1: 100overnight at 4°C, followed by conjugation to the SP Kit (Rabbit) and DAB staining.

18. Paraformaldehyde-fixed, paraffin embedded Human Cerebrum; Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15 min; Antibody incubation with Sodium Potassium ATPase Monoclonal Antibody, Unconjugated (TMAB-13035) at 1: 100overnight at 4°C, followed by conjugation to the SP Kit (Rabbit) and DAB staining.

19. Paraformaldehyde-fixed, paraffin embedded Human Fundus; Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15 min; Antibody incubation with Sodium Potassium ATPase Monoclonal Antibody, Unconjugated (TMAB-13035) at 1: 100overnight at 4°C, followed by conjugation to the SP Kit (Rabbit) and DAB staining.

20. Paraformaldehyde-fixed, paraffin embedded Human Heart; Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15 min; Antibody incubation with Sodium Potassium ATPase Monoclonal Antibody, Unconjugated (TMAB-13035) at 1: 100overnight at 4°C, followed by conjugation to the SP Kit (Rabbit) and DAB staining.

21. 4% Paraformaldehyde-fixed Hela (H) cell; Triton X-100 at r. T. for 20 min; Antibody incubation with (Sodium Potassium ATPase) monoclonal Antibody, unconjugated (TMAB-13035) 1: 100, 90 min at 37°C; followed by conjugated Goat Anti-Rabbit IgG antibody (green, BF488) at 37°C for 90 min, DAPI (blue) was used to stain the cell nuclei. PBS instead of the primary antibody was used as the blank control.

## A DRUG SCREENING EXPERT

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Application: ICC/IF,IF,IHC-Fr,IHC-P,WB

Recommended ICC/IF=1:50-200; IF=1:100-500; IHC-Fr=1:100-500; IHC-P=1:100-500; WB=1:2000-20000

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### Properties

Stability & Storage: Store at 2°C-8°C for 1 month. Store at -20°C or -80°C for 12 months. Avoid repeated freeze-thaw cycles.

Shipping: Shipping with blue ice.

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### Antigen Details

Immunogen: Recombinant Protein: human Sodium Potassium ATPase aa 1-100

Antigen Species: Human

Gene ID: 476

Uniprot ID: P05023

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### Research Background

The protein encoded by this gene belongs to the family of P-type cation transport ATPases, and to the subfamily of Na<sup>+</sup>/K<sup>+</sup>-ATPases. Na<sup>+</sup>/K<sup>+</sup>-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<sup>+</sup>/K<sup>+</sup>-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. [provided by RefSeq, May2009].

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