

## Anti-Sodium Potassium ATPase Antibody (8042)

### Product Details

Ig Type:	IgG1, $\kappa$
Reactivity:	Human, Mouse, Rat
Molecular Weight:	Theoretical: 113 kDa. Actual: 110 kDa.
Clone:	8042
Purification:	Protein A purified

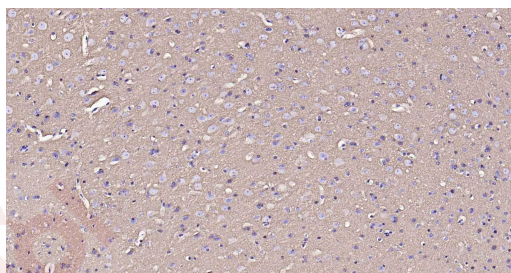
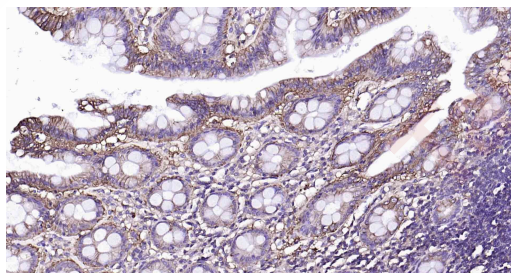
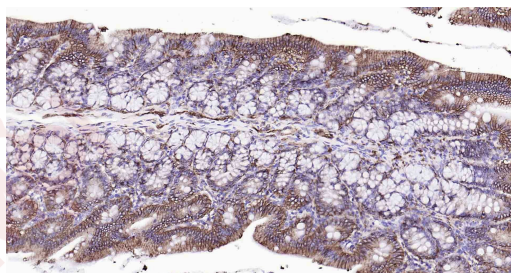
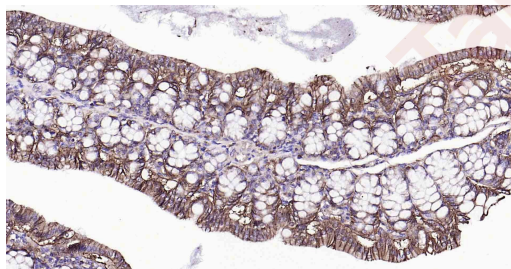
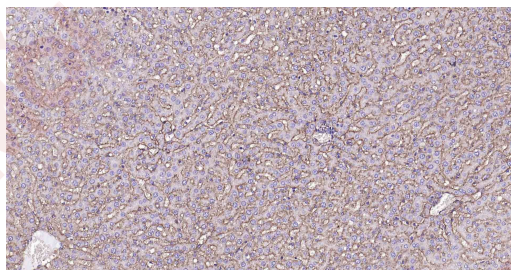
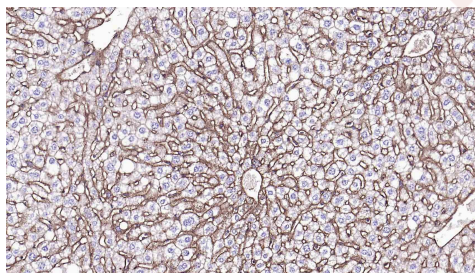
### Applications

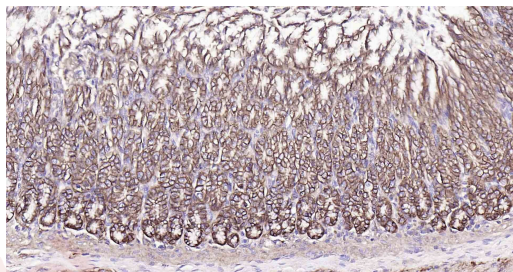
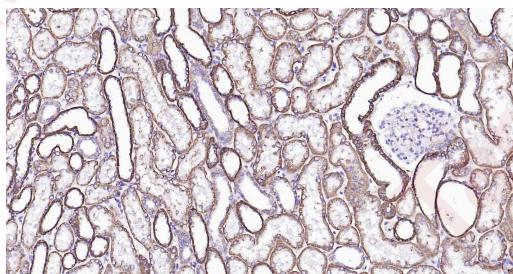
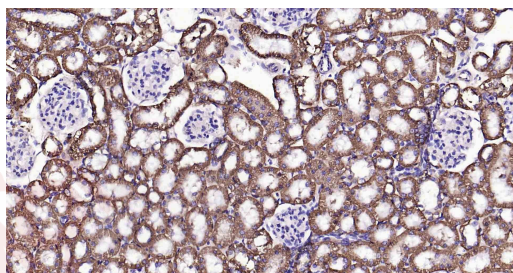
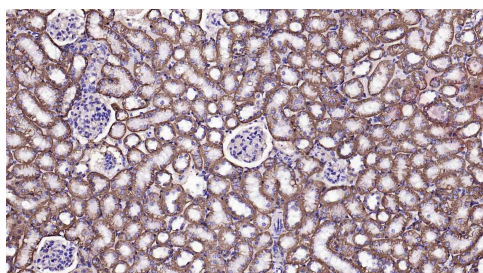
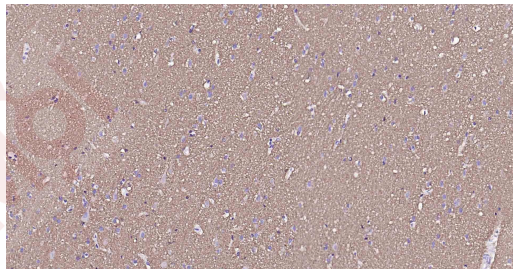
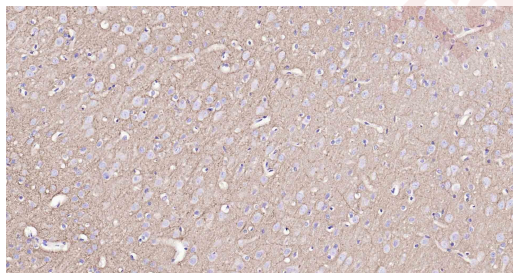
#### Verified Activity:

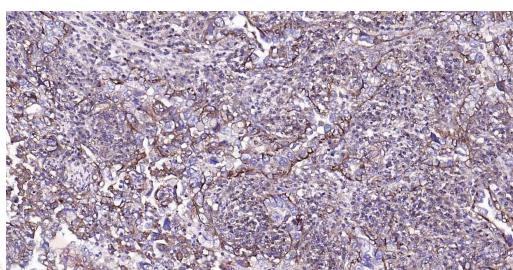
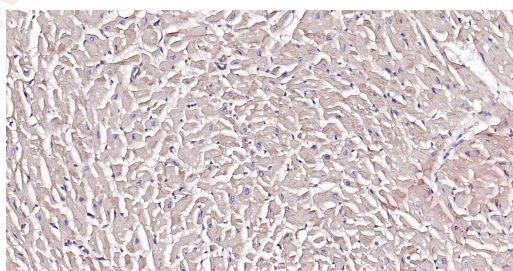
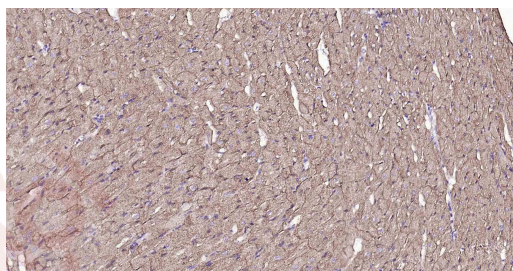
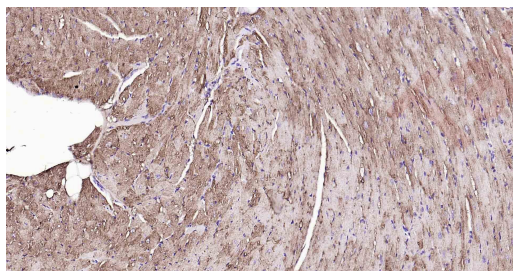
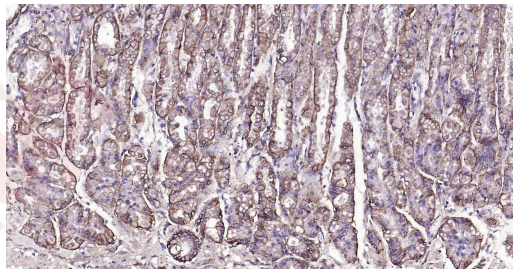
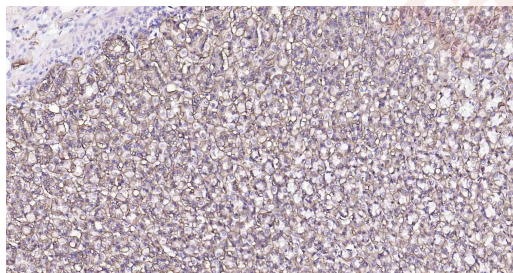
1. Paraformaldehyde-fixed, paraffin embedded Mouse Liver; Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15 min; Antibody incubation with Sodium Potassium ATPase Monoclonal Antibody, Unconjugated (TMAB-01753) at 1:200 overnight at 4°C, followed by conjugation to the SP Kit (Mouse) and DAB staining.
2. 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-01753) at 1:200 overnight at 4°C, followed by conjugation to the SP Kit (Mouse) and DAB staining.
3. 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-01753) at 1:200 overnight at 4°C, followed by conjugation to the SP Kit (Mouse) and DAB staining.
4. 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-01753) at 1:200 overnight at 4°C, followed by conjugation to the SP Kit (Mouse) and DAB staining.
5. 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-01753) at 1:200 overnight at 4°C, followed by conjugation to the SP Kit (Mouse) and DAB staining.
6. 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-01753) at 1:200 overnight at 4°C, followed by conjugation to the SP Kit (Mouse) and DAB staining.
7. 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-01753) at 1:200 overnight at 4°C, followed by conjugation to the SP Kit (Mouse) and DAB staining.
8. 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-01753) at 1:200 overnight at 4°C, followed by conjugation to the SP Kit (Mouse) and DAB staining.
9. 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-01753) at 1:200 overnight at 4°C, followed by conjugation to the SP Kit (Mouse) and DAB staining.

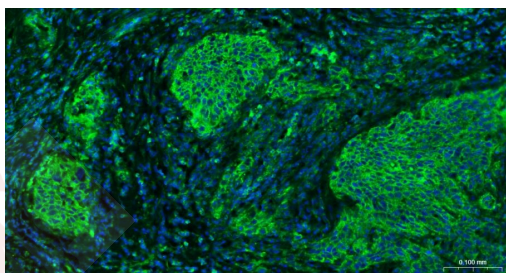
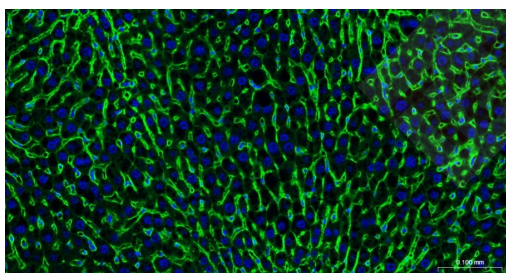
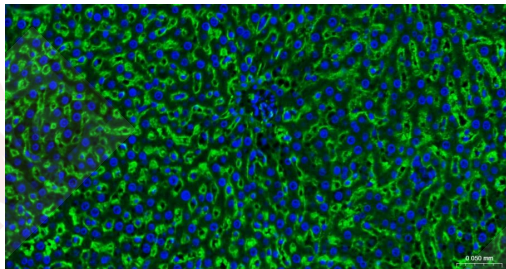
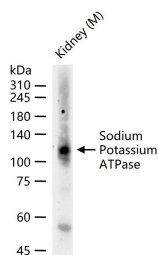
10. Paraformaldehyde-fixed, paraffin embedded Rat Kidney; Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15 min; Antibody incubation with Sodium Potassium ATPase Monoclonal Antibody, Unconjugated (TMAB-01753) at 1:200 overnight at 4°C, followed by conjugation to the SP Kit (Mouse) and DAB staining.
11. Paraformaldehyde-fixed, paraffin embedded Human Kidney; Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15 min; Antibody incubation with Sodium Potassium ATPase Monoclonal Antibody, Unconjugated (TMAB-01753) at 1:200 overnight at 4°C, followed by conjugation to the SP Kit (Mouse) and DAB staining.
12. 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-01753) at 1:200 overnight at 4°C, followed by conjugation to the SP Kit (Mouse) 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-01753) at 1:200 overnight at 4°C, followed by conjugation to the SP Kit (Mouse) and DAB staining.
14. 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-01753) at 1:200 overnight at 4°C, followed by conjugation to the SP Kit (Mouse) and DAB staining.
15. Paraformaldehyde-fixed, paraffin embedded Mouse Heart; Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15 min; Antibody incubation with Sodium Potassium ATPase Monoclonal Antibody, Unconjugated (TMAB-01753) at 1:200 overnight at 4°C, followed by conjugation to the SP Kit (Mouse) and DAB staining.
16. Paraformaldehyde-fixed, paraffin embedded Rat Heart; Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15 min; Antibody incubation with Sodium Potassium ATPase Monoclonal Antibody, Unconjugated (TMAB-01753) at 1:200 overnight at 4°C, followed by conjugation to the SP Kit (Mouse) and DAB staining.
17. 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-01753) at 1:200 overnight at 4°C, followed by conjugation to the SP Kit (Mouse) and DAB staining.
18. 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-01753) at 1:200 overnight at 4°C, followed by conjugation to the SP Kit (Mouse) and DAB staining.
19. 25 µg total protein per Lane of various lysates probed with Sodium Potassium ATPase monoclonal antibody, unconjugated (TMAB-01753) at 1:1000 dilution and 4°C overnight incubation. Followed by conjugated secondary antibody incubation at RT for 60 min.
20. 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-01753) at 1:200 overnight at 4°C. Followed by conjugated Goat Anti-Mouse IgG antibody (green), DAPI (blue) was used to stain the cell nucleus.
21. 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-01753) at 1:200 overnight at 4°C. Followed by conjugated Goat Anti-Mouse IgG antibody (green), DAPI (blue) was used to stain the cell nucleus.
22. 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-01753) at 1:200 overnight at 4°C. Followed by conjugated Goat Anti-Mouse IgG antibody (green), DAPI (blue) was used to stain the cell

nucleus.









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

Recommended WB: 1:2000-10000; IHC-P: 1:100-500; IHC-Fr: 1:100-500; IF: 1:100-500

### Properties

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

Shipping: Shipping with blue ice.

### Antigen Details

Immunogen: Recombinant Protein: human Sodium Potassium ATPase

Antigen Species: Human

Gene ID: 476

Uniprot ID: P05023

Synonyms: Na K ATPase alpha A catalytic polypeptide;Na(+)/K(+) ATPase 1;AT1A 1;ATPase Na+/K+transporting subunit alpha 1;Na+, K+ATPase alpha subunit;EC 3.6.3.9;alpha 1 Sodium Potassium ATPase;Na(+)/K(+) ATPase alpha-1 subunit;MGC3285;Sodium pump 1;MGC51750; Nkaa1b;sodium-potassium ATPase catalytic subunit alpha-1;MGC38419;Sodium pump subunit alpha-1;Atpa-1;Na, K ATPase alpha 1 subunit;AT1A1;Sodium potassium ATPase alpha 1

polypeptide;ATP1A1;Na<sup>+</sup>/K<sup>+</sup>ATPase alpha 1 subunit;Na K ATPase catalytic subunit alpha A protein;Sodium/potassium-transporting ATPase subunit alpha-1;A1A1;ATPase Na<sup>+</sup>/K<sup>+</sup>transporting alpha 1 polypeptide;BC010319;Na<sup>+</sup>/K<sup>+</sup>ATPase 1

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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].

**Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins**

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