



# AT1A3 Monoclonal Antibody

Catalog No	YP-mAb-06214
Isotype	IgG
Reactivity	Human;Rat;Mouse
Applications	WB
Gene Name	ATP1A3
Protein Name	Sodium/potassium-transporting ATPase subunit alpha-3 (Na(+)/K(+) ATPase alpha-3 subunit) (EC 3.6.3.9) (Na(+)/K(+) ATPase alpha(III) subunit) (Sodium pump subunit alpha-3)
Immunogen	Synthesized peptide derived from human protein . at AA range: 950-1030
Specificity	AT1A3 Monoclonal Antibody detects endogenous levels of protein.
Formulation	Liquid in PBS containing 50% glycerol, and 0.02% sodium azide.
Source	Monoclonal, Mouse,IgG
Purification	The antibody was affinity-purified from mouse antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	WB 1:500-1:2000
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	
Observed Band	111kD
Cell Pathway	Cell membrane ; Multi-pass membrane protein .
Tissue Specificity	Brain,Cerebellum,Heart,Uterus,
Function	catalytic activity:ATP + H(2)O + Na(+)(In) + K(+)(Out) = ADP + phosphate + Na(+)(Out) + K(+)(In).,disease:Defects in ATP1A3 are the cause of dystonia type 12 (DYT12) [MIM:128235]; also known as rapid-onset dystonia parkinsonism (RDP). DYT12 is an autosomal dominant dystonia-parkinsonism disorder. Dystonia is defined by the presence of sustained involuntary muscle contractions, often leading to abnormal postures. DYT12 patients develop dystonia and parkinsonism between 15 and 45 years of age. The disease is characterized by an unusually rapid evolution of signs and symptoms. The sudden onset of symptoms over hours to a few weeks, often associated with physical or emotional stress, suggests a trigger initiating a nervous system insult resulting in permanent neurologic disability.,function:This is the catalytic component of the active enzyme, which catalyzes the hydrolysis of ATP coupled wi
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 3 subunit. Alternatively spliced transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jan 2012],

**matters needing attention**

Avoid repeated freezing and thawing!

**Usage suggestions**

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

## Products Images