

Product name:	AMPD1 Rabbit Polyclonal Antibody
Cat number:	ABN06834
Conjugate:	Unconjugated
Size:	100μL
Clone:	Polyclonal
Concentration:	1mg/ml
Host:	Rabbit
Isotype:	IgG
Immunogen:	The antiserum was produced against synthesized peptide derived from human AMPD1. AA range:261-310
Reactivity:	Human,Mouse,Rat
Applications:	IHC 1:100-1:300,ICC/IF 1:50-1:200,ELISA 1:20000-1:40000
Purification:	Affinity purification
Form:	Liquid
Buffer:	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
Storage:	Store at 4°C short term. Aliquot and store at -20°C for 12 months. Avoid freeze/thaw cycles.
Background:	Adenosine monophosphate deaminase 1 catalyzes the deamination of AMP to IMP in skeletal muscle and plays an important role in the purine nucleotide cycle. Two other genes have been identified, AMPD2 and AMPD3, for the liver- and erythrocyte-specific isoforms, respectively. Deficiency of the muscle-specific enzyme is apparently a common cause of exercise-induced myopathy and probably the most common cause of metabolic myopathy in the human. Alternatively spliced transcript variants encoding different isoforms have been identified in this gene.[provided by RefSeq, Feb 2010],catalytic activity:AMP + H(2)O = IMP + NH(3).,disease:Defects in AMPD1 are the cause of adenosine monophosphate deaminase deficiency muscle type (AMPDDM) [MIM:102770]. AMPDDM is a metabolic disorder resulting in exercise-related myopathy. It is characterized by exercise-induced muscle aches, cramps, and early fatigue.,function:AMP deaminase plays a critical role in energy metabolism.,pathway:Purine metabolism; IMP biosynthesis via salvage pathway; IMP from AMP: step 1/1.,similarity:Belongs to the adenosine and AMP deaminases family.,subunit:Homotetramer.,tissue specificity:Three isoforms are present in mammals: AMP deaminase 1 is the predominant form in skeletal muscle; AMP deaminase 2 predominates in smooth muscle, non-muscle tissue, embryonic muscle and undifferentiated myoblasts; AMP deaminase 3 is found in erythrocytes.,