

Product name:	AMPD3 Rabbit Polyclonal Antibody
Cat number:	ABN06836
Conjugate:	Unconjugated
Size:	100µL
Clone:	Polyclonal
Concentration:	1mg/ml
Host:	Rabbit
Isotype:	IgG
Immunogen:	Synthesized peptide derived from AMPD3 . at AA range: 280-360
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:

This gene encodes a member of the AMP deaminase gene family. The encoded protein is a highly regulated enzyme that catalyzes the hydrolytic deamination of adenosine monophosphate to inosine monophosphate, a branch point in the adenylate catabolic pathway. This gene encodes the erythrocyte (E) isoforms, whereas other family members encode isoforms that predominate in muscle (M) and liver (L) cells. Mutations in this gene lead to the clinically asymptomatic, autosomal recessive condition erythrocyte AMP deaminase deficiency. Alternatively spliced transcript variants encoding different isoforms of this gene have been described. [provided by RefSeq, Jul 2008], catalytic activity: AMP + H₂O = IMP + NH₃., disease: Defects in AMPD3 are the cause of adenosine monophosphate deaminase deficiency erythrocyte type (AMPDDE) [MIM:102772]. AMPDDE is a metabolic disorder due to lack of activity of the erythrocyte isoform of AMP deaminase. It is a clinically asymptomatic condition characterized by a 50% increase in steady-state levels of ATP in affected cells. Individuals with complete deficiency of erythrocyte AMP deaminase are healthy and have no hematologic disorders., 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.,