Product Name: AMPD1 Rabbit Polyclonal Antibody
Catalog #: APRab06834
For research use only.

Summary

Description	Rabbit polyclonal Antibody
Host	Rabbit
Application	IHC,ICC/IF,ELISA
Reactivity	Human,Mouse,Rat
Conjugation	Unconjugated
Modification	Unmodified
Isotype	IgG
Clonality	Polyclonal
Form	Liquid
Concentration	1mg/ml
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Liquid in PBS containing 50% glycerol, 0.5% protective protein and 0.02% New type preservative N.
Purification	Affinity purification

Application

Dilution Ratio	IHC 1:100-1:300,ICC/IF 1:50-1:200,ELISA 1:20000-1:40000
Molecular Weight	

Antigen Information

Gene Name	AMPD1
Alternative Names	AMPD1; AMP deaminase 1; AMP deaminase isoform M; Myoadenylate deaminase
Gene ID	270.0
SwissProt ID	P23109
Immunogen	The antiserum was produced against synthesized peptide derived from human AMPD1. AA range:261-310

Background

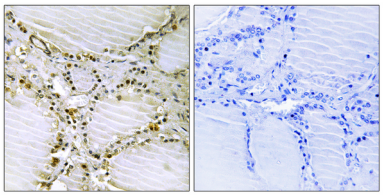
Adenosine monophosphate deaminase 1 catalyzes the deamination of AMP to IMP in skeletal muscle and plays an important

role in the purine nucleotide cycle. Two other genes have been identified, AMPD2 and AMPD3, for the liver- and erythocyte-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.,

Research Area

Purine metabolism;

Image Data



Immunohistochemistry analysis of paraffin-embedded human thyroid gland tissue, using AMPD1 Antibody. The picture on the right is blocked with the synthesized peptide.