



AMPD1 Polyclonal Antibody

Catalog No	YP-Ab-02495
Isotype	IgG
Reactivity	Human;Mouse;Rat
Applications	IHC;IF;ELISA
Gene Name	AMPD1
Immunogen	The antiserum was produced against synthesized peptide derived from human AMPD1. AA range:261-310
Specificity	AMPD1 Polyclonal Antibody detects endogenous levels of AMPD1 protein.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Polyclonal, Rabbit,IgG
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	IHC: 1/100 - 1/300. ELISA: 1/40000.. IF 1:50-200
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	AMP deaminase 1;AMP deaminase isoform M;AMPD1;AMPD1-Specific;MAD;MADA;Myoadenylate deaminase
Observed Band	
Calculated Molecular Weight	
Cell Pathway	cytosol,
Tissue Specificity	Skeletal muscle,
Function	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.,

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],

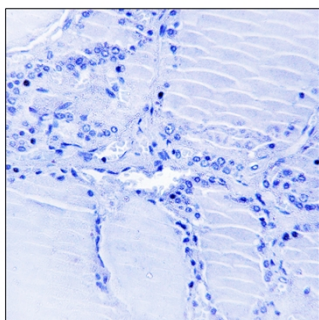
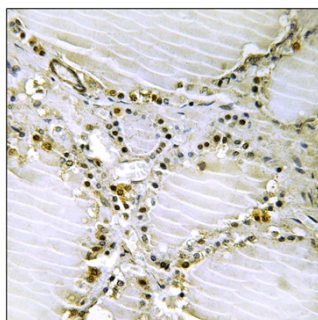
matters needing attention

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



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