



Rabbit Anti-Apaf1 Interacting Protein antibody

SL6792R

Product Name:	Apaf1 Interacting Protein
Chinese Name:	凋亡蛋白活性因子1相互作用蛋白抗体
Alias:	MTNB_HUMAN; Apaf1 Interacting Protein; APIP2; CG129; CGI 29; MMRP19; MTRu 1 P dehydratase; Probable methylthioribulose 1 phosphate dehydratase.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Chicken,Dog,Pig,Cow,Horse,Rabbit,Sheep,
Applications:	ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	27kDa
Cellular localization:	cytoplasmic
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human APIP:151-242/242
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	The mammalian homologues of the key cell death gene CED 4 in <i>C. elegans</i> has been identified recently from human and mouse and designated Apaf1 (for apoptosis protease activating factor 1). Apaf1 binds to cytochrome c (Apaf2) and caspase 9 (Apaf3), which leads to caspase 9 activation. Activated caspase 9 in turn cleaves and activates caspase 3 that is one of the key proteases, being responsible for the proteolytic cleavage of many key proteins in apoptosis. A new Apaf1 Interacting Protein (APIP) also known as

CG129 and MMRP19, has been identified as a negative regulator of ischemic injury. APIP competes with Caspase 9 binding site of Apaf1. APIP is predicted to code for a 204 amino acid. An isoform of APIP, APIP2 encodes a 242 amino acid protein, which is an alternative splicing variant differing in its N terminus from APIP. APIP transcript is ubiquitously expressed in most adult tissue with high expression in skeletal muscle, heart, and kidney.

Function:

Catalyzes the dehydration of methylthioribulose-1-phosphate (MTRu-1-P) into 2,3-diketo-5-methylthiopentyl-1-phosphate (DK-MTP-1-P). Has an anti-apoptotic function and prevents muscle ischemic damage. Inhibits the cytochrome c-dependent and APAF1-mediated cell death.

Subunit:

Interacts with APAF1.

Subcellular Location:

Cytoplasm.

Tissue Specificity:

Ubiquitously expressed with high expression in skeletal muscle, heart and kidney.

Similarity:

Belongs to the aldolase class II family. MtnB subfamily.

SWISS:

Q96GX9

Gene ID:

51074

Database links:

[Entrez Gene: 508345](#)Cow

[Entrez Gene: 475943](#)Dog

[Entrez Gene: 32334](#)Fruit fly (Drosophila melanogaster)

[Entrez Gene: 100732536](#)Guinea pig

[Entrez Gene: 51074](#)Human

[Entrez Gene: 56369](#)Mouse

[Entrez Gene: 100525733](#)Pig

[Entrez Gene: 295961](#)Rat

[Entrez Gene: 447941](#)Zebrafish

[Oimim: 612491](#)Human

[SwissProt: Q0VCJ2](#)Cow

[SwissProt: Q9VY93](#)Fruit fly (Drosophila melanogaster)

[SwissProt: Q96GX9](#)Human

[SwissProt: Q8BP46](#)Mouse

[SwissProt: Q9WVQ5](#)Mouse

[SwissProt: Q66I75](#)Zebrafish

[Unigene: 5343](#)Fruit fly (Drosophila melanogaster)

[Unigene: 447794](#)Human

[Unigene: 24772](#)Mouse

[Unigene: 15452](#)Rat

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.