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APIP Antibody (Center)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP22073c

Product Information

Application	WB, IHC-P, E
Primary Accession	Q96GX9
Reactivity	Human, Mouse
Predicted	Rat, Bovine, Canine, Rabbit
Host	Rabbit
Clonality	polyclonal
Isotype	Rabbit IgG
Clone Names	RB55049
Calculated MW	27125

Additional Information

Gene ID	51074
Other Names	Methylthioribulose-1-phosphate dehydratase {ECO:0000255|HAMAP-Rule:MF_03116}, MTRu-1-P dehydratase {ECO:0000255|HAMAP-Rule:MF_03116}, 4.2.1.109 {ECO:0000255|HAMAP-Rule:MF_03116}, APAF1-interacting protein {ECO:0000255|HAMAP-Rule:MF_03116}, hAPIP, APIP {ECO:0000255|HAMAP-Rule:MF_03116}
Target/Specificity	This APIP antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 111-142 amino acids from the Central region of human APIP.
Dilution	WB~~1:2000 IHC-P~~1:100~500 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	APIP Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	APIP {ECO:0000255|HAMAP-Rule:MF_03116}

Function	Catalyzes the dehydration of methylthioribulose-1-phosphate (MTRu-1-P) into 2,3-diketo-5-methylthiopentyl-1-phosphate (DK-MTP-1-P). Functions in the methionine salvage pathway, which plays a key role in cancer, apoptosis, microbial proliferation and inflammation. May inhibit the CASP1-related inflammatory response (pyroptosis), the CASP9-dependent apoptotic pathway and the cytochrome c-dependent and APAF1-mediated cell death.
Cellular Location	Cytoplasm {ECO:0000255|HAMAP-Rule:MF_03116, ECO:0000269|PubMed:15262985, ECO:0000269|PubMed:23285211}
Tissue Location	Isoform 1 is ubiquitously expressed. Isoform 2 is expressed at lower levels and detected in heart, brain, pancreas, liver, placenta, skeletal muscle and kidney

Background

Catalyzes the dehydration of methylthioribulose-1- phosphate (MTRu-1-P) into 2,3-diketo-5-methylthiopentyl-1- phosphate (DK-MTP-1-P). Functions in the methionine salvage pathway, which plays a key role in cancer, apoptosis, microbial proliferation and inflammation. May inhibit the CASP1-related inflammatory response (pyroptosis), the CASP9-dependent apoptotic pathway and the cytochrome c-dependent and APAF1-mediated cell death.

References

Lai C.-H.,et al.Genome Res. 10:703-713(2000).
Ota T.,et al.Nat. Genet. 36:40-45(2004).
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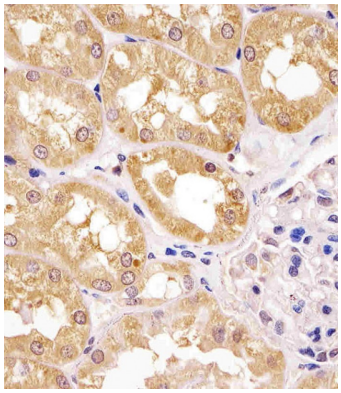
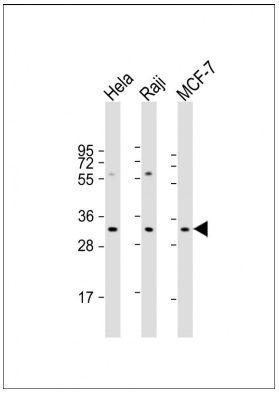
Cho D.-H.,et al.J. Biol. Chem. 279:39942-39950(2004).
Burkard T.R.,et al.BMC Syst. Biol. 5:17-17(2011).

Images



AP22073c staining APIP in human kidney tissue sections by Immunohistochemistry (IHC-P - paraformaldehyde-fixed, paraffin-embedded sections). Tissue was fixed with formaldehyde and blocked with 3% BSA for 0. 5 hour at room temperature; antigen retrieval was by heat mediation with a citrate buffer (pH6). Samples were incubated with primary antibody (1/25) for 1 hours at 37°C. A undiluted biotinylated goat polyvalent antibody was used as the secondary antibody.

All lanes : Anti-APIP Antibody (Center) at 1:2000 dilution Lane 1: Hela whole cell lysate Lane 2: Raji whole cell lysate Lane 3: MCF-7 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 27 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.