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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
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

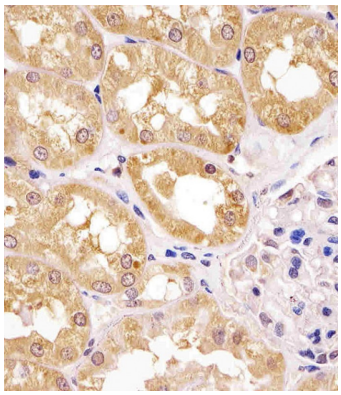
Background

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.

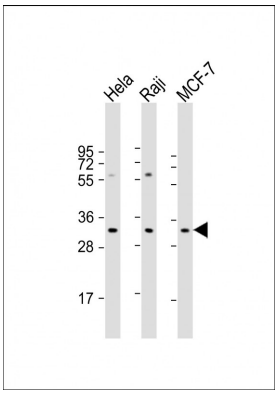
References

Lai C.-H.,et al.Genome Res. 10:703-713(2000).
Ota T.,et al.Nat. Genet. 36:40-45(2004).
Taylor T.D.,et al.Nature 440:497-500(2006).
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'.