

Auh antibody - N-terminal region

Rabbit Polyclonal Antibody

Catalog # AI11736

Product Information

Application	WB
Primary Accession	Q9JLZ3
Other Accession	NM_016709 , NP_057918
Reactivity	Human, Mouse, Rat, Rabbit, Pig, Dog, Bovine
Predicted	Human, Mouse, Rat, Rabbit, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	33395

Additional Information

Gene ID	11992
Alias Symbol	C77140, W91705
Other Names	Methylglutaconyl-CoA hydratase, mitochondrial, 4.2.1.18, AU-specific RNA-binding enoyl-CoA hydratase, AU-binding enoyl-CoA hydratase, muAUH, Auh
Format	Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose.
Reconstitution & Storage	Add 50 ul of distilled water. Final anti-Auh antibody concentration is 1 mg/ml in PBS buffer with 2% sucrose. For longer periods of storage, store at 20°C. Avoid repeat freeze-thaw cycles.
Precautions	Auh antibody - N-terminal region is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	Auh
Function	Catalyzes the fifth step in the leucine degradation pathway, the reversible hydration of 3-methylglutaconyl-CoA (3-MG-CoA) to 3-hydroxy-3-methylglutaryl-CoA (HMG-CoA). Can catalyze the reverse reaction but at a much lower rate in vitro. HMG-CoA is then quickly degraded by another enzyme (such as HMG-CoA lyase) to give acetyl-CoA and acetoacetate. Uses other substrates such as (2E)-glutaconyl-CoA efficiently in vitro, and to a lesser extent 3-methylcrotonyl-CoA (3-methyl-(2E)-butenoyl-CoA), crotonyl-CoA ((2E)-butenoyl-CoA) and 3-hydroxybutanoyl-CoA (the missing carboxylate reduces affinity to the active site) (By similarity). Originally it was

identified as an RNA- binding protein as it binds to AU-rich elements (AREs) in vitro. AREs direct rapid RNA degradation and mRNA deadenylation (PubMed:[10072761](#)). Might have itaconyl-CoA hydratase activity, converting itaconyl-CoA into citramalyl-CoA in the C5-dicarboxylate catabolism pathway. The C5- dicarboxylate catabolism pathway is required to detoxify itaconate, an antimicrobial metabolite and immunomodulator produced by macrophages during certain infections, that can act as a vitamin B12-poisoning metabolite (By similarity).

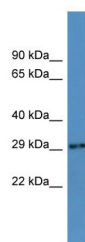
Cellular Location

Mitochondrion.

Tissue Location

Detected in heart, brain, liver, spleen, skeletal muscle and kidney. Expressed in brain, kidney, liver and spleen tissue (at protein level).

Images



WB Suggested Anti-Auh Antibody Titration: 0.2-1 µg/ml
ELISA Titer: 1:62500
Positive Control: Mouse Heart

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