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Auh antibody - N-terminal region
Rabbit Polyclonal Antibody
Catalog # AI11736

Specification

Auh antibody - N-terminal region - Product Information

Application	**WB**
Primary Accession	Q9JLZ3
Other Accession	NM_016709, NP_057918
Reactivity	**Human, Mouse, Rat, Rabbit, Pig, Bovine, Dog**
Predicted	**Human, Mouse, Rat, Rabbit, Bovine**
Host	**Rabbit**
Clonality	**Polyclonal**
Calculated MW	**33kDa KDa**

Auh antibody - N-terminal region - 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.

Auh antibody - N-terminal region - 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.

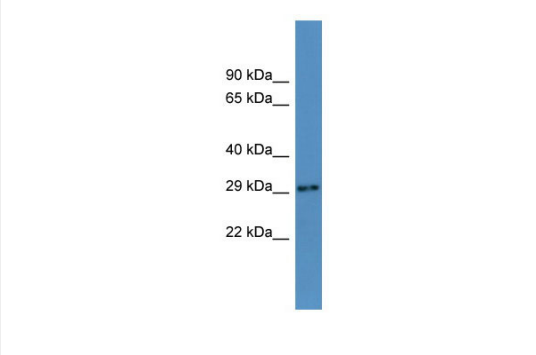
Tissue Location
Detected in heart, brain, liver, spleen, skeletal muscle and kidney. Expressed in brain, kidney, liver and spleen tissue (at protein level).

Auh antibody - N-terminal region - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Auh antibody - N-terminal region - Images



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