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DHTKD1 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP10715C

Specification

DHTKD1 Antibody (Center) - Product Information

Application	**WB,E**
Primary Accession	Q96HY7
Other Accession	Q4KLP0, A2ATU0, NP_061176.3
Reactivity	**Human, Mouse**
Predicted	**Rat**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**103077**
Antigen Region	**392-421**

DHTKD1 Antibody (Center) - Additional Information

Gene ID 55526

Other Names
Probable 2-oxoglutarate dehydrogenase E1 component DHKTD1, mitochondrial, Dehydrogenase E1 and transketolase domain-containing protein 1, DHTKD1, KIAA1630

Target/Specificity
This DHTKD1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 392-421 amino acids from the Central region of human DHTKD1.

Dilution
WB~~1:1000

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
DHTKD1 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

DHTKD1 Antibody (Center) - Protein Information

Name DHTKD1

Synonyms KIAA1630

Function 2-oxoadipate dehydrogenase (E1a) component of the 2- oxoadipate dehydrogenase complex (OADHC) (PubMed:29191460, PubMed:29752936, PubMed:32303640, PubMed:32633484, PubMed:32695416). Participates in the first step, rate limiting for the overall conversion of 2-oxoadipate (alpha-ketoadipate) to glutaryl-CoA and CO(2) catalyzed by the whole OADHC (PubMed:29191460, PubMed:32695416). Catalyzes the irreversible decarboxylation of 2-oxoadipate via the thiamine diphosphate (ThDP) cofactor and subsequent transfer of the decarboxylated acyl intermediate on an oxidized dihydrolipoyl group that is covalently amidated to the E2 enzyme (dihydrolipoyllysine- residue succinyltransferase or DLST) (Probable) (PubMed:29752936, PubMed:32303640, PubMed:32633484). Can catalyze the decarboxylation of 2-oxoglutarate in vitro, but at a much lower rate than 2-oxoadipate (PubMed:29191460, PubMed:29752936, PubMed:32633484, PubMed:32695416). Responsible for the last step of L-lysine, L-hydroxylysine and L- tryptophan catabolism with the common product being 2-oxoadipate (Probable).

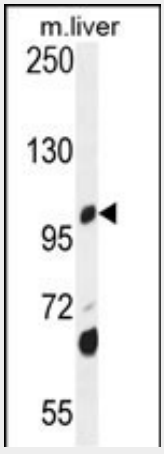
Cellular Location
Mitochondrion.

DHTKD1 Antibody (Center) - 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

DHTKD1 Antibody (Center) - Images



DHTKD1 Antibody (Center) (Cat. #AP10715c) western blot analysis in mouse liver tissue lysates (35ug/lane).This demonstrates the DHTKD1 antibody detected the DHTKD1 protein (arrow).

DHTKD1 Antibody (Center) - Background

The 2-oxoglutarate dehydrogenase complex catalyzes the overall conversion of 2-oxoglutarate to

succinyl-CoA and CO(2). It contains multiple copies of three enzymatic components: 2-oxoglutarate dehydrogenase (E1), dihydrolipoamide succinyltransferase (E2) and lipoamide dehydrogenase (E3) (By similarity).

DHTKD1 Antibody (Center) - References

Wang, A.G., et al. Biochem. Biophys. Res. Commun. 345(3):1022-1032(2006)
Grupe, A., et al. Am. J. Hum. Genet. 78(1):78-88(2006)