

DHTKD1 Antibody (Center)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP10715C**Specification**

DHTKD1 Antibody (Center) - Product Information

Application	WB,E
Primary Accession	O96HY7
Other Accession	O4KLP0 , 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

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

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).

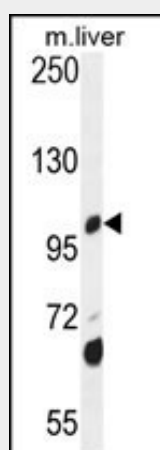
Cellular Location
Mitochondrion.

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 Cytometry](#)
- [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)