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DHTKD1 Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP55517

Product Information

Application	IHC-P, IHC-F, IF, ICC, E
Primary Accession	Q96HY7
Reactivity	Rat, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	103077

Additional Information

Gene ID	55526
Other Names	Probable 2-oxoglutarate dehydrogenase E1 component DHKTD1, mitochondrial, 1.2.4.2, Dehydrogenase E1 and transketolase domain-containing protein 1, DHTKD1, KIAA1630
Dilution	IHC-P=1:100-500,IHC-F=1:100-500,ICC=1:100-500,IF=1:100-500,ELISA=1:5000-10000
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

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.

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