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ODC Antibody

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP51516

Product Information

Application	WB, IHC-P
Primary Accession	Q9BQT8
Reactivity	Human, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	33303

Additional Information

Gene ID	89874
Other Names	Mitochondrial 2-oxodicarboxylate carrier, Solute carrier family 25 member 21, SLC25A21, ODC
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the center region of human ODC. The exact sequence is proprietary.
Dilution	WB~~1:1000 IHC-P~~N/A
Format	0.01M PBS, pH 7.2, 0.09% (W/V) Sodium azide, Glycerol 50%
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

Name	SLC25A21
Synonyms	ODC
Function	Transports dicarboxylates across the inner membranes of mitochondria by a counter-exchange mechanism (PubMed:11083877). Can transport 2-oxoadipate (2-oxohexanedioate), 2-oxoglutarate, adipate (hexanedioate), glutarate, and to a lesser extent, pimelate (heptanedioate), 2-oxopimelate (2-oxoheptanedioate), 2-aminoadipate (2- aminohexanedioate), oxaloacetate, and citrate (PubMed:11083877). Plays a central role in catabolism of lysine, hydroxylysine, and tryptophan, by transporting common metabolite intermediates (such as 2-oxoadipate) into the mitochondria, where it is converted into acetyl-CoA and can enter the citric acid (TCA) cycle (Probable).
Cellular Location	Mitochondrion inner membrane; Multi-pass membrane protein
Tissue Location	Expressed in placenta, gall bladder and colon.

Background

Transports C5-C7 oxodicarboxylates across the inner membranes of mitochondria. Can transport 2-oxoadipate, 2- oxoglutarate, adipate, glutarate, and to a lesser extent, pimelate, 2-oxopimelate, 2-aminoadipate, oxaloacetate, and citrate.

References

Fiermonte G.,et al.J. Biol. Chem. 276:8225-8230(2001).
Ota T.,et al.Nat. Genet. 36:40-45(2004).
Heilig R.,et al.Nature 421:601-607(2003).
Burkard T.R.,et al.BMC Syst. Biol. 5:17-17(2011).