

# ALDH4A1 Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP20738c

## **Product Information**

Application	WB, E
Primary Accession	<u>P30038</u>
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB49356
Calculated MW	61719

# **Additional Information**

Gene ID	8659
Other Names	Delta-1-pyrroline-5-carboxylate dehydrogenase, mitochondrial, P5C dehydrogenase, Aldehyde dehydrogenase family 4 member A1, L-glutamate gamma-semialdehyde dehydrogenase, ALDH4A1, ALDH4, P5CDH
Target/Specificity	This ALDH4A1 antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 522-556 amino acids from the C-terminal region of human ALDH4A1.
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	ALDH4A1 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

### **Protein Information**

Name	ALDH4A1
Synonyms	ALDH4, P5CDH
Function	Irreversible conversion of delta-1-pyrroline-5-carboxylate (P5C), derived either from proline or ornithine, to glutamate. This is a necessary step in the

	pathway interconnecting the urea and tricarboxylic acid cycles. The preferred substrate is glutamic gamma- semialdehyde, other substrates include succinic, glutaric and adipic semialdehydes.
Cellular Location	Mitochondrion matrix.
Tissue Location	Highest expression is found in liver followed by skeletal muscle, kidney, heart, brain, placenta, lung and pancreas

#### Background

Irreversible conversion of delta-1-pyrroline-5- carboxylate (P5C), derived either from proline or ornithine, to glutamate. This is a necessary step in the pathway interconnecting the urea and tricarboxylic acid cycles. The preferred substrate is glutamic gamma-semialdehyde, other substrates include succinic, glutaric and adipic semialdehydes.

#### References

Hu C.-A.,et al.J. Biol. Chem. 271:9795-9800(1996). Stagos D.,et al.Submitted (NOV-2008) to the EMBL/GenBank/DDBJ databases. Ota T.,et al.Nat. Genet. 36:40-45(2004). Suzuki Y.,et al.Submitted (APR-2005) to the EMBL/GenBank/DDBJ databases. Gregory S.G.,et al.Nature 441:315-321(2006).

#### Images



Western blot analysis of lysates from HepG2 cell line and human liver tissue lysate(from left to right), using ALDH4A1 Antibody (C-term)(Cat. #AP20738c). AP20738c was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L(HRP) at 1:5000 dilution was used as the secondary antibody. Lysates at 35ug per lane.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.