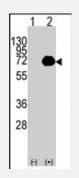
ACOX1 polyclonal antibody

Catalog # PAB4368 Size 400 uL

Applications



Western Blot (Transfected lysate)

Western blot analysis of ACOX1 (arrow) using rabbit ACOX1 polyclonal antibody (Cat # PAB4368). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected with the ACOX1 gene (Lane 2) (Origene Technologies).

Specification	
Product Description	Rabbit polyclonal antibody raised against synthetic peptide of ACOX1.
Immunogen	A synthetic peptide (conjugated with KLH) corresponding to C-terminus of human ACOX1.
Host	Rabbit
Reactivity	Human
Form	Liquid
Purification	Protein G purification
Recommend Usage	ELISA (1:1000) Western Blot (1:50-100) The optimal working dilution should be determined by the end user.
Storage Buffer	In PBS (0.09% sodium azide)
Storage Instruction	Store at 4°C. For long term storage store at -20°C. Aliquot to avoid repeated freezing and thawing.
Note	This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which shoul d be handled by trained staff only.



Applications

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Enzyme-linked Immunoabsorbent Assay

Gene Info — ACOX1

Entrez GenelD	<u>51</u>
Protein Accession#	<u>NP_009223;Q15067</u>
Gene Name	ACOX1
Gene Alias	ACOX, MGC1198, PALMCOX, SCOX
Gene Description	acyl-Coenzyme A oxidase 1, palmitoyl
Omim ID	<u>264470 609751</u>
Gene Ontology	Hyperlink
Gene Summary	The protein encoded by this gene is the first enzyme of the fatty acid beta-oxidation pathway, whic h catalyzes the desaturation of acyl-CoAs to 2-trans-enoyl-CoAs. It donates electrons directly to m olecular oxygen, thereby producing hydrogen peroxide. Defects in this gene result in pseudoneon atal adrenoleukodystrophy, a disease that is characterized by accumulation of very long chain fatt y acids. Alternatively spliced transcript variants encoding different isoforms have been identified. [provided by RefSeq
Other Designations	acyl-CoA oxidase, straight-chain peroxisomal fatty acyl-CoA oxidase

Publication Reference

Generation and initial analysis of more than 15,000 full-length human and mouse cDNA sequences.

Strausberg RL, Feingold EA, Grouse LH, Derge JG, Klausner RD, Collins FS, Wagner L, Shenmen CM, Schuler GD, Altschul SF, Zeeberg B, Buetow KH, Schaefer CF, Bhat NK, Hopkins RF, Jordan H, Moore T, Max SI, Wang J, Hsieh F, Diatchenko L, Marusina K, Farmer AA, Rubin GM, Hong L, Stapleton M, Soares MB, Bonaldo MF, Casavant TL, Scheetz TE, Brownstein MJ, Usdin TB, Toshiyuki S, Carninci P, Prange C, Raha SS, Loquellano NA, Peters GJ, Abramson RD, Mullahy SJ, Bosak SA, McEwan PJ, McKernan KJ, Malek JA,

PNAS 2002 Dec; 99(26):16899.



• Overexpression and characterization of the human peroxisomal acyl-CoA oxidase in insect cells.

Chu R, Varanasi U, Chu S, Lin Y, Usuda N, Rao MS, Reddy JK. The Journal of Biological Chemistry 1995 Mar; 270(9):4908.

Application: IEM, WB-Re, WB-Tr, Insect, Recombinant proteins, Sf9 cells

Molecular cloning and functional expression of a human peroxisomal acyl-coenzyme A oxidase.

Aoyama T, Tsushima K, Souri M, Kamijo T, Suzuki Y, Shimozawa N, Orii T, Hashimoto T. Biochemical and Biophysical Research Communications 1994 Feb; 198(3):1113.

Application: WB-Tr, Human, Human skin fibroblasts

Pathway

- <u>alpha-Linolenic acid metabolism</u>
- Biosynthesis of plant hormones
- Biosynthesis of unsaturated fatty acids
- Fatty acid metabolism
- Metabolic pathways
- PPAR signaling pathway