

Datasheet for ABIN7317600 **ACOX1 Protein (His tag)**



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Overview

Quantity:	100 µg
Target:	ACOX1
Origin:	Human
Source:	Baculovirus infected Insect Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This ACOX1 protein is labelled with His tag.

Product Details

Purpose:	Recombinant Human ACOX1/aox Protein (His Tag)
Sequence:	Met 1-Leu 660
Characteristics:	A DNA sequence encoding the human ACOX1 (AAH08767.1) (Met 1-Leu 660) was expressed, with a polyhistidine tag at the N-terminus.
Purity:	> 85 % as determined by reducing SDS-PAGE.
Endotoxin Level:	< 1.0 EU per µg as determined by the LAL method.

Target Details

Target:	ACOX1
Alternative Name:	ACOX1/aox (ACOX1 Products)
Background:	Background: Peroxisomal acyl-coenzyme A oxidase 1 (ACOX1 or AOX) is the first enzyme of the fatty acid beta-oxidation pathway and belongs to the Acyl-CoA oxidase family. Human liver peroxisomes contain two acyl-CoA oxidases, namely, palmitoyl-CoA oxidase (ACOX1/AOX) and

Target Details

a branched chain acyl-CoA oxidase. The palmitoyl-CoA oxidase (ACOX1/AOX) oxidizes the CoA esters of straight chain fatty acids and prostaglandins and donates electrons directly to molecular oxygen, thereby producing H₂O₂. Human ACOX1/AOX is a protein of 661-amino acids, including the carboxyl-terminal sequence(Ser-Lys-Leu) known as a minimal peroxisome-targeting signal. Human ACOX1/AOX, the first and rate-limiting enzyme of the peroxisomal β -oxidation pathway, has two isoforms including ACOX1a and ACOX1b, transcribed from a single gene. The human ACOX1b isoform is more effective than the ACOX1a isoform in reversing the Acox1 null phenotype in the mouse partly because of the Substrate utilization differences.

Synonym: ACOX;PALMCOX;SCOX

Molecular Weight: 76.7 kDa

Pathways: [Regulation of Lipid Metabolism by PPARalpha](#), [Monocarboxylic Acid Catabolic Process](#)

Application Details

Restrictions: For Research Use only

Handling

Format: Lyophilized

Reconstitution: Please refer to the printed manual for detailed information.

Buffer: Lyophilized from sterile 20 mM Tris, 500 mM NaCl, pH 7.0, 20 % glycerol, 3 mM DTT

Storage: 4 °C,-20 °C,-80 °C

Storage Comment: Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.