

## Datasheet for ABIN5541563

# anti-ACOX1 antibody



#### Overview

Quantity:	0.4 mL
Target:	ACOX1
Reactivity:	Human
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This ACOX1 antibody is un-conjugated
Application:	Western Blotting (WB), Immunofluorescence (IF), Immunocytochemistry (ICC), Immunohistochemistry (Paraffin-embedded Sections) (IHC (p))

## **Product Details**

Immunogen:	ACOX1 recombinant protein.
Clone:	153CT43-1-1
Isotype:	lgG1
Specificity:	This antibody recognizes Human ACOX1. Other species not tested.
Purification:	Protein G Chromatography, followed by dialysis against PBS

#### **Target Details**

Target:	ACOX1
Alternative Name:	acox1 (ACOX1 Products)
Background:	ACOX1 is the first enzyme of the fatty acid beta-oxidation pathway, which catalyzes the

desaturation of acyl-CoAs to 2-trans-enoyl-CoAs. It donates electrons directly to molecular oxygen, thereby producing hydrogen peroxide. Defects in this gene result in pseudoneonatal adrenoleukodystrophy, a disease that is characterized by accumulation of very long chain fatty acids. Function: Catalyzes the desaturation of acyl-CoAs to 2-trans- enoyl-CoAs. Isoform 1 shows highest activity against medium-chain fatty acyl-CoAs and activity decreases with increasing chain length. Isoform 2 is active against a much broader range of substrates and shows activity towards very long-chain acyl-CoAs. Isoform 2 is twice as active as isoform 1 against 16-hydroxy- palmitoyl-CoA and is 25 % more active against 1,16-hexadecanodioyl- CoA. Cellular Location: Peroxisome. Tissue Location: Widely expressed with highest levels of isoform 1 and isoform 2 detected in testis. Isoform 1 is expressed at higher levels than isoform 2 in liver and kidney while isoform 2 levels are higher in brain, lung, muscle, white adipose tissue and testis. Levels are almost equal in heart.

UniProt: Q15067

Pathways: Regulation of Lipid Metabolism by PPARalpha, Monocarboxylic Acid Catabolic Process

## Application Details

Application Notes: Western blot: 1/100-1/500. Immunofluorescence: 1/10-1/50. Immunohistochemistry on

Paraffin Sections: 1/10-1/50.

Restrictions: For Research Use only

#### Handling

Format:	Liquid
Buffer:	PBS Preservatives: 0.09 % (W/V) Sodium Azide
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	4 °C,-20 °C
Storage Comment:	Store undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing. Shelf life: one year from despatch.
Expiry Date:	12 months