

ACOX1 Antibody (C-term)
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP2523B**Specification**

ACOX1 Antibody (C-term) - Product Information

Application	WB,E
Primary Accession	Q15067
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Antigen Region	629-659

ACOX1 Antibody (C-term) - Additional Information**Gene ID 51****Other Names**

Peroxisomal acyl-coenzyme A oxidase 1, AOX, Palmitoyl-CoA oxidase, Straight-chain acyl-CoA oxidase, SCOX, ACOX1, ACOX

Target/Specificity

This ACOX1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 629-659 amino acids from the C-terminal region of human ACOX1.

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 prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

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

ACOX1 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

ACOX1 Antibody (C-term) - Protein Information

Name ACOX1 ([HGNC:119](#))

Synonyms ACOX

Function Involved in the initial and rate-limiting step of peroxisomal beta-oxidation of straight-chain saturated and unsaturated very-long- chain fatty acids (PubMed:[15060085](#), PubMed:[17458872](#), PubMed:[17603022](#), PubMed:[32169171](#), PubMed:[33234382](#), PubMed:[7876265](#)). Catalyzes the desaturation of fatty acyl-CoAs such as palmitoyl-CoA (hexadecanoyl- CoA) to 2-trans-enoyl-CoAs ((2E)-enoyl-CoAs) such as (2E)-hexadecenoyl- CoA, and donates electrons directly to molecular oxygen (O₂), thereby producing hydrogen peroxide (H₂O₂) (PubMed:[17458872](#), PubMed:[17603022](#), PubMed:[7876265](#)).

Cellular Location

Peroxisome.

Tissue Location

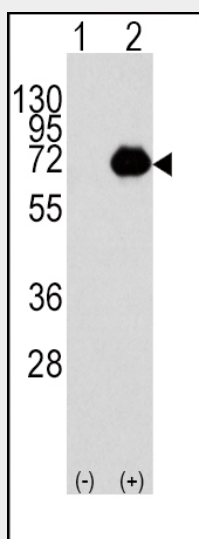
Widely expressed with highest levels of isoform 1 and isoform 2 detected in testis. Isoform 1 is expressed at higher levels than isoform 2 in liver and kidney while isoform 2 levels are higher in brain, lung, muscle, white adipose tissue and testis. Levels are almost equal in heart.

ACOX1 Antibody (C-term) - Protocols

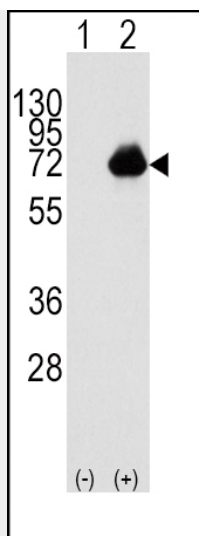
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

ACOX1 Antibody (C-term) - Images



Western blot analysis of ACOX1 (arrow) using rabbit polyclonal ACOX1 Antibody (C-term) (RB04651). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected with the ACOX1 gene (Lane 2) (Origene Technologies).



Western blot analysis of ACOX1 (arrow) using rabbit polyclonal ACOX1 Antibody (C-term) (RB04652). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected with the ACOX1 gene (Lane 2) (Origene Technologies).

ACOX1 Antibody (C-term) - 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.

ACOX1 Antibody (C-term) - References

Strausberg, R.L., et al., Proc. Natl. Acad. Sci. U.S.A. 99(26):16899-16903 (2002).
 Chu, R., et al., J. Biol. Chem. 270(9):4908-4915 (1995).
 Aoyama, T., et al., Biochem. Biophys. Res. Commun. 198(3):1113-1118 (1994).
 Fournier, B., et al., J. Clin. Invest. 94(2):526-531 (1994).
 Varanasi, U., et al., Proc. Natl. Acad. Sci. U.S.A. 91(8):3107-3111 (1994).

ACOX1 Antibody (C-term) - Citations

- [Mechanisms of resistance of hepatocyte retinoid X receptor alpha-null mice to WY-14,643-induced hepatocyte proliferation and cholestasis.](#)