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AOX1 Antibody (Center)
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP6700c

Specification

AOX1 Antibody (Center) - Product Information

Application	**WB, FC,E**
Primary Accession	Q06278
Reactivity	**Human**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**147918**
Antigen Region	**698-726**

AOX1 Antibody (Center) - Additional Information

Gene ID 316

Other Names
Aldehyde oxidase, Aldehyde oxidase 1, Azaheterocycle hydroxylase, 1173-, AOX1, AO

Target/Specificity
This AOX1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 698-726 amino acids from the Central region of human AOX1.

Dilution
WB~~1:1000
FC~~1:10~50

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
AOX1 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

AOX1 Antibody (Center) - Protein Information

Name AOX1 (HGNC:553)

Synonyms AO

Function Oxidase with broad substrate specificity, oxidizing aromatic azaheterocycles, such as N1-methylnicotinamide, N-methylphthalazinium and phthalazine, as well as aldehydes, such as benzaldehyde, retinal, pyridoxal, and vanillin. Plays a key role in the metabolism of xenobiotics and drugs containing aromatic azaheterocyclic substituents. Participates in the bioactivation of prodrugs such as famciclovir, catalyzing the oxidation step from 6-deoxypenciclovir to penciclovir, which is a potent antiviral agent. Is probably involved in the regulation of reactive oxygen species homeostasis. May be a prominent source of superoxide generation via the one-electron reduction of molecular oxygen. May also catalyze nitric oxide (NO) production via the reduction of nitrite to NO with NADH or aldehyde as electron donor. May play a role in adipogenesis.

Cellular Location
Cytoplasm

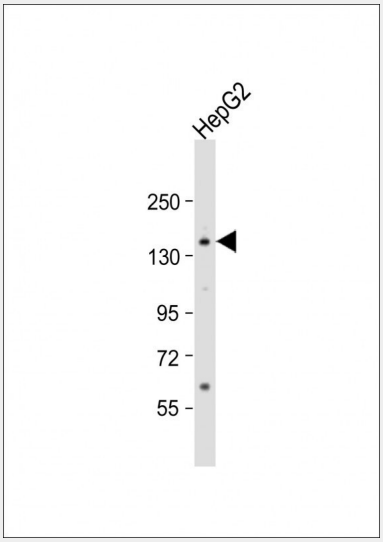
Tissue Location
Abundant in liver, expressed in adipose tissue and at lower levels in lung, skeletal muscle, pancreas. In contrast to mice, no significant gender difference in AOX1 expression level (at protein level).

AOX1 Antibody (Center) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

AOX1 Antibody (Center) - Images



Anti-AOX1 Antibody (Center) at 1:1000 dilution + HepG2 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 148 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

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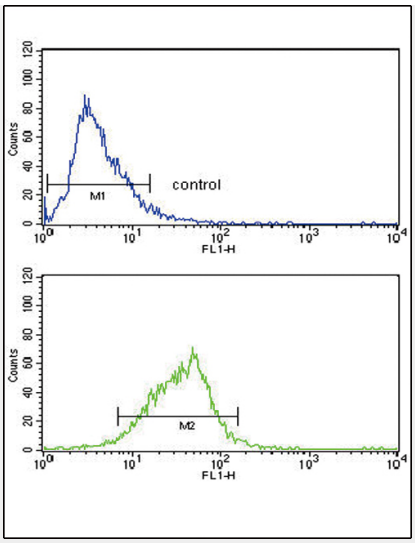

AOX1 Antibody (Center) (Cat.#AP6700c) flow cytometry analysis of HepG2 cells (bottom histogram) compared to a negative control cell (top histogram). FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

AOX1 Antibody (Center) - Background

AOX1 catalyzes: An aldehyde + H2O + O2 = a carboxylic acid + H2O2.

AOX1 Antibody (Center) - References

Wright,R.M., Proc. Natl. Acad. Sci. U.S.A. 90 (22), 10690-10694 (1993)