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AOX1 / Aldehyde Oxidase Antibody
Rabbit Polyclonal Antibody
Catalog # ALS17160

Specification

AOX1 / Aldehyde Oxidase Antibody - Product Information

Application	**IHC-P**
Primary Accession	Q06278
Other Accession	316
Reactivity	**Human**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**IgG**
Calculated MW	**147918**

AOX1 / Aldehyde Oxidase Antibody - Additional Information

Gene ID 316

Other Names
AOX1, AO, Aldehyde oxidase 1, AOH1, Aldehyde oxidase

Target/Specificity
Human AOX1 / Aldehyde Oxidase

Reconstitution & Storage
PBS, pH 7.4, 0.03% Proclin 300, 50% glycerol. Long term: -20°C; Short term: +4°C. Avoid repeat freeze-thaw cycles.

Precautions
AOX1 / Aldehyde Oxidase Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

AOX1 / Aldehyde Oxidase Antibody - 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

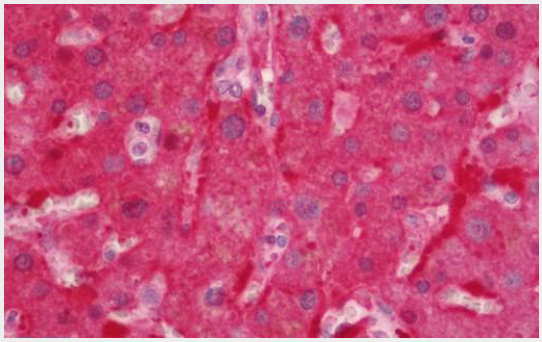
Tissue Location
Abundant in liver, expressed in adipose tissue and at lower levels in lung, skeletal muscle, pancreas. In contrast to mice, no significant gender difference in AOX1 expression level (at protein level).

AOX1 / Aldehyde Oxidase Antibody - Protocols

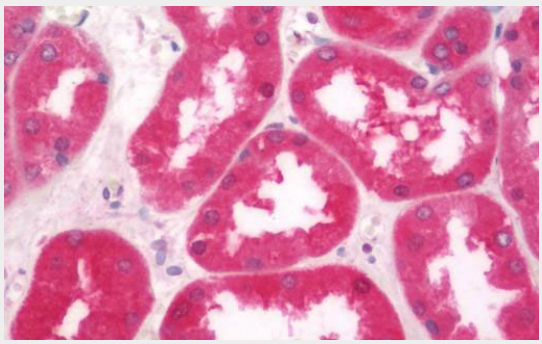
Provided below are standard protocols that you may find useful for product applications.

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

AOX1 / Aldehyde Oxidase Antibody - Images



Human Liver: Formalin-Fixed, Paraffin-Embedded (FFPE)



Human Kidney: Formalin-Fixed, Paraffin-Embedded (FFPE)

AOX1 / Aldehyde Oxidase Antibody - Background

Oxidase with broad substrate specificity, oxidizing aromatic azaheterocycles, such as N1-methylnicotinamide and N- methylphthalazinium, as well as aldehydes, such as benzaldehyde,

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AOX1 / Aldehyde Oxidase Antibody - References

Wright R.M.,et al.Proc. Natl. Acad. Sci. U.S.A. 90:10690-10694(1993).
Wright R.M.,et al.Redox Rep. 3:135-144(1997).
Ichida K.,et al.Biochem. Biophys. Res. Commun. 282:1194-1200(2001).
Hillier L.W.,et al.Nature 434:724-731(2005).
Mural R.J.,et al.Submitted (JUL-2005) to the EMBL/GenBank/DDBJ databases.