

**AOX1 / Aldehyde Oxidase Antibody**  
**Rabbit Polyclonal Antibody**  
**Catalog # ALS17160****Specification**

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**AOX1 / Aldehyde Oxidase Antibody - Product Information**

Application	IHC-P
Primary Accession	<a href="#">Q06278</a>
Other Accession	<a href="#">316</a>
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

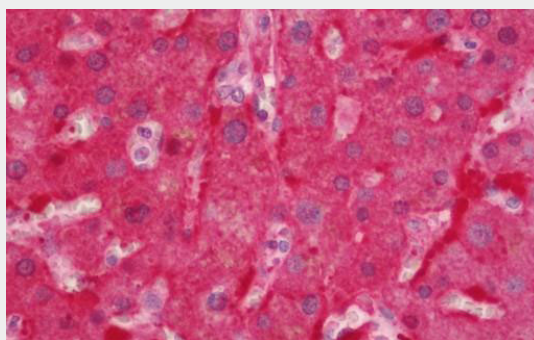
**Tissue Location**

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).

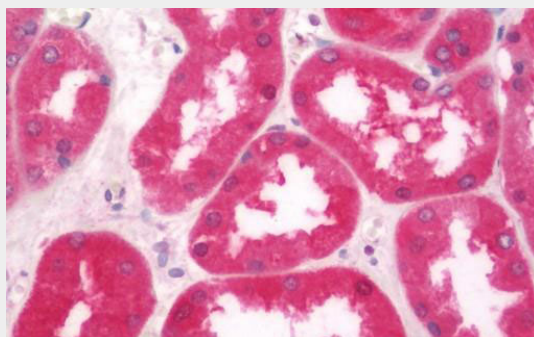
**AOX1 / Aldehyde Oxidase Antibody - Protocols**

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

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

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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. Also may 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.

#### **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).  
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