

**Aldehyde Oxidase Antibody**  
**Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP51721**

**Specification**

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**Aldehyde Oxidase Antibody - Product Information**

Application	WB, E
Primary Accession	<a href="#">Q06278</a>
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	150 KDa

**Aldehyde Oxidase Antibody - Additional Information**

**Gene ID** 316

**Other Names**

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

**Format**

0.01M PBS, pH 7.2, 0.09% (W/V) Sodium azide, Glycerol 50%

**Storage**

Store at -20 °C. Stable for 12 months from date of receipt

**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).

### **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](#)

### **Aldehyde Oxidase Antibody - Images**

### **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, 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.

### **Aldehyde Oxidase Antibody - References**

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Ichida K., et al. Biochem. Biophys. Res. Commun. 282:1194-1200(2001).  
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Mural R.J., et al. Submitted (JUL-2005) to the EMBL/GenBank/DDBJ databases.