

AOX1 / Aldehyde Oxidase Antibody (aa521-570)
Rabbit Polyclonal Antibody
Catalog # ALS17212**Specification**

AOX1 / Aldehyde Oxidase Antibody (aa521-570) - Product Information

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

AOX1 / Aldehyde Oxidase Antibody (aa521-570) - Additional Information**Gene ID** [316](#)**Other Names**

AOX1, AO, Aldehyde oxidase 1, AOH1, Aldehyde oxidase

Target/Specificity

AOX1 Antibody detects endogenous levels of total AOX1 protein.

Reconstitution & StoragePBS (without Mg²⁺, Ca²⁺), pH 7.4, 150 mM sodium chloride, 0.02% sodium azide, 50% glycerol.
Store at -20°C for up to one year.**Precautions**

AOX1 / Aldehyde Oxidase Antibody (aa521-570) is for research use only and not for use in diagnostic or therapeutic procedures.

AOX1 / Aldehyde Oxidase Antibody (aa521-570) - 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).

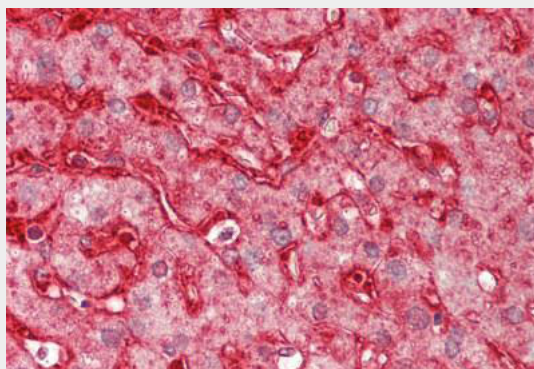
Volume

50 μ l

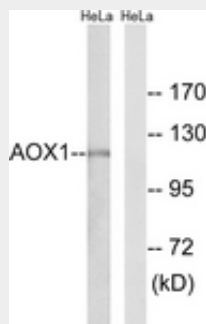
AOX1 / Aldehyde Oxidase Antibody (aa521-570) - Protocols

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 (aa521-570) - Images

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



Western blot of extracts from HeLa cells, using AOX1 Antibody.

AOX1 / Aldehyde Oxidase Antibody (aa521-570) - Background

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AOX1 / Aldehyde Oxidase Antibody (aa521-570) - 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.