

Aldehyde Oxidase Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP51721

Specification

Aldehyde Oxidase Antibody - Product Information

Application WB, E
Primary Accession O06278

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
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

Aldehyde Oxidase Antibody - Images

Aldehyde Oxidase Antibody - Background

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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.