10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

AOX1 Antibody (Center) Blocking Peptide

Synthetic peptide
Catalog # BP6700c

Specification

AOX1 Antibody (Center) Blocking Peptide - Product Information

Primary Accession Q06278

AOX1 Antibody (Center) Blocking Peptide - Additional Information

Gene ID 316

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

Target/Specificity
The synthetic peptide sequence used to generate the antibody AP6700c was selected from the Center region of human AOX1. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

AOX1 Antibody (Center) Blocking Peptide - 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 Antibody (Center) Blocking Peptide - Protocols

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

- Blocking Peptides

AOX1 Antibody (Center) Blocking Peptide - Images

AOX1 Antibody (Center) Blocking Peptide - Background

AOX1 catalyzes: An aldehyde + H2O + O2 = a carboxylic acid + H2O2.

AOX1 Antibody (Center) Blocking Peptide - References

Wright,R.M., Proc. Natl. Acad. Sci. U.S.A. 90 (22), 10690-10694 (1993)