

Rabbit anti-Human AOX1 Polyclonal Antibody | anti-AOX1 antibody

AOX1 Antibody (Center)

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA284175	Rabbit	Human	Flow Cytometry, Functional Assay, ELISA, Western Blot

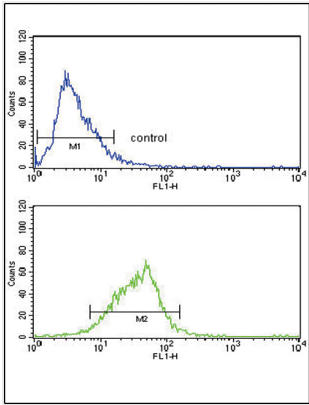
PRODUCT SYNONYMS

AOX1; Polyclonal Antibody; AOX1 Antibody (Center); Aldehyde oxidase; Aldehyde oxidase 1; Azaheterocycle hydroxylase; 1173-; AO; anti-AOX1 antibody

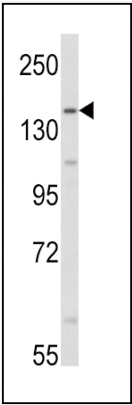
PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human
Clonality	Polyclonal
Isotype	Rabbit Ig
Specificity	This AOX1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 698-726 amino acids from the Central region of human AOX1.
Purity/Purification	Purified Rabbit Polyclonal Antibody (Pab)
Form/Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.
Sequence Positions	698-726
Sequence Length	1338
Applicable Applications for anti-AOX1 antibody	FCM/FACS (Flow Cytometry), ELISA, WB (Western Blot)
Antigen Type	Synthetic Peptide
Clone Names	RB19711
Antigen Source	HUMAN
Function	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.
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).
Preparation and Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

IMAGES



FCM/FACS (Flow Cytometry)
AOX1 Antibody (Center) flow cytometry analysis of HepG2 cells (bottom histogram) compared to a negative control cell (top histogram). FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.



WB (Western Blot)
Anti-AOX1 Antibody (Center) at 1:1000 dilution + HepG2 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 148 kDa Blocking/Dilution buffer: 5% NFDm/TBST.

ADDITIONAL INFORMATION

Related Product Information for anti-AOX1 antibody	AOX1 catalyzes: An aldehyde + H2O + O2 = a carboxylic acid + H2O2.
Product Categories/Family for anti-AOX1 antibody	Metabolism; Signal Transduction
References	Wright,R.M., Proc. Natl. Acad. Sci. U.S.A. 90 (22), 10690-10694 (1993)

NCBI AND UNIPROT INFORMATION

NCBI GI #	71773480
NCBI GeneID	316
NCBI Accession #	NP_001150.3
NCBI GenBank Nucleotide #	NM_001159.3
UniProt Accession #	Q06278; O14765; Q53RR8; Q53TV3; Q9BYF0; Q9UPG6
Molecular Weight	147918
NCBI Official Full Name	aldehyde oxidase
NCBI Official Synonym Full Names	aldehyde oxidase 1
NCBI Official Symbol	AOX1
NCBI Official Synonym Symbols	AO; AOH1
NCBI Protein Information	aldehyde oxidase
UniProt Protein Name	Aldehyde oxidase
UniProt Gene Name	AOX1
UniProt Synonym Gene Names	AO
UniProt Entry Name	AOXA_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

