

# HAO1 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AW5452

## Product Information

Application	WB
Primary Accession	<a href="#">Q9UJM8</a>
Other Accession	<a href="#">Q9WU19</a>
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	40924
Isotype	Rabbit IgG
Antigen Source	HUMAN

## Additional Information

Gene ID	54363
Antigen Region	157-185
Other Names	Hydroxyacid oxidase 1, HAOX1, Glycolate oxidase, GOX, HAO1, GOX1, HAOX1
Dilution	WB~~1:1000
Target/Specificity	This HAO1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 157-185 amino acids from the Central region of human HAO1.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
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.
Precautions	HAO1 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

## Protein Information

Name	HAO1 {ECO:0000303 PubMed:10978532, ECO:0000312 HGNC:HGNC:4809}
Function	Broad substrate specificity (S)-2-hydroxy-acid oxidase that preferentially oxidizes glycolate (PubMed: <a href="#">10777549</a> , PubMed: <a href="#">10978532</a> , PubMed: <a href="#">17669354</a> , PubMed: <a href="#">18215067</a> ). The glyoxylate produced by the oxidation of glycolate can

then be utilized by alanine-glyoxylate aminotransferase for the peroxisomal synthesis of glycine; this pathway appears to be an important step for the detoxification of glyoxylate which, if allowed to accumulate, may be metabolized to oxalate with formation of kidney stones (PubMed:[10978532](#), PubMed:[17669354](#)). Can also catalyze the oxidation of glyoxylate, and long chain hydroxyacids such as 2-hydroxyhexadecanoate and 2-hydroxyoctanoate, albeit with much lower catalytic efficiency (PubMed:[10777549](#), PubMed:[17669354](#), PubMed:[18215067](#)). Active in vitro with the artificial electron acceptor 2,6-dichlorophenolindophenol (DCIP), but O<sub>2</sub> is believed to be the physiological electron acceptor, leading to the production of H<sub>2</sub>O<sub>2</sub> (PubMed:[10777549](#), PubMed:[10978532](#), PubMed:[17669354](#), PubMed:[18215067](#)). Is not active on L-lactate and 2-hydroxybutanoate (PubMed:[10777549](#)).

<b>Cellular Location</b>	Peroxisome matrix.
<b>Tissue Location</b>	Highly expressed in liver.

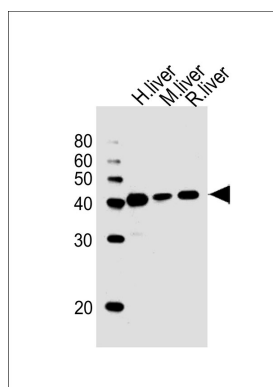
## Background

HAO1 is most active on glycolate, a two-carbon substrate. The protein is also active on 2-hydroxy fatty acids.

## References

Jones,J.M., et.al., J. Biol. Chem. 275 (17), 12590-12597 (2000)  
Kohler,S.A., et.al., J. Biol. Chem. 274 (4), 2401-2407 (1999)

## Images



All lanes : Anti-HAO1 Antibody (Center) at 1:1000 dilution  
Lane 1: human liver lysates Lane 2: mouse liver lysates  
Lane 3: rat liver lysates Lysates/proteins at 20 µg per lane.  
Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase  
conjugated at 1/10000 dilution Predicted band size : 41  
kDa Blocking/Dilution buffer: 5% NFDM/TBST.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.