

**HAO1 Antibody (Center)**  
**Affinity Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AW5452**

**Specification**

---

**HAO1 Antibody (Center) - Product Information**

Application	WB,E
Primary Accession	<a href="#">O9UJM8</a>
Other Accession	<a href="#">O9WU19</a>
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	H=41;M=41;R=41 KDa
Isotype	Rabbit IgG
Antigen Source	HUMAN

**HAO1 Antibody (Center) - 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.

**HAO1 Antibody (Center) - 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="http://www.uniprot.org/citations/10777549" target="\_blank">10777549</a>, PubMed:<a href="http://www.uniprot.org/citations/10978532" target="\_blank">10978532</a>, PubMed:<a href="http://www.uniprot.org/citations/17669354" target="\_blank">17669354</a>, PubMed:<a href="http://www.uniprot.org/citations/18215067" target="\_blank">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:<a href="http://www.uniprot.org/citations/10978532" target="\_blank">10978532</a>, PubMed:<a href="http://www.uniprot.org/citations/17669354" target="\_blank">17669354</a>). 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:<a href="http://www.uniprot.org/citations/10777549" target="\_blank">10777549</a>, PubMed:<a href="http://www.uniprot.org/citations/17669354" target="\_blank">17669354</a>, PubMed:<a href="http://www.uniprot.org/citations/18215067" target="\_blank">18215067</a>). 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:<a href="http://www.uniprot.org/citations/10777549" target="\_blank">10777549</a>, PubMed:<a href="http://www.uniprot.org/citations/10978532" target="\_blank">10978532</a>, PubMed:<a href="http://www.uniprot.org/citations/17669354" target="\_blank">17669354</a>, PubMed:<a href="http://www.uniprot.org/citations/18215067" target="\_blank">18215067</a>). Is not active on L-lactate and 2-hydroxybutanoate (PubMed:<a href="http://www.uniprot.org/citations/10777549" target="\_blank">10777549</a>).

## Cellular Location

Peroxisome matrix.

## Tissue Location

Highly expressed in liver.

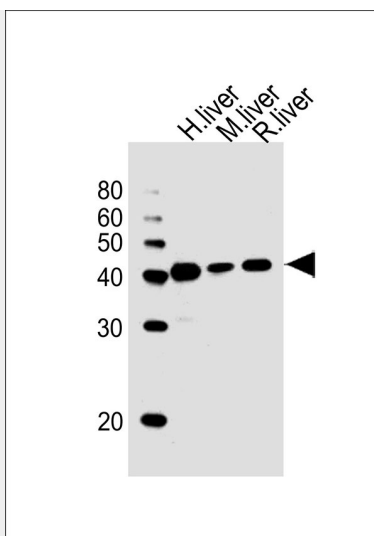
## HAO1 Antibody (Center) - Protocols

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](#)

## HAO1 Antibody (Center) - 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  $\mu$ g per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution Predicted band size : 41 kDa Blocking/Dilution buffer: 5% NFDN/TBST.

#### **HAO1 Antibody (Center) - Background**

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

#### **HAO1 Antibody (Center) - 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)