

**HAO1 Antibody (Center)**  
**Affinity Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP8605c****Specification**

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

Application	WB,E
Primary Accession	<a href="#">O9UJM8</a>
Other Accession	<a href="#">O9WU19</a>
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Antigen Region	157-185

**HAO1 Antibody (Center) - Additional Information****Gene ID** 54363**Other Names**

Hydroxyacid oxidase 1, HAOX1, Glycolate oxidase, GOX, HAO1, GOX1, HAOX1

**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.

**Dilution**

WB~~1:1000

E~~Use at an assay dependent concentration.

**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:[10777549](#), PubMed:[10978532](#), PubMed:[17669354](#), PubMed:[18215067](#)). 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](#)).

**Cellular Location**

Peroxisome matrix.

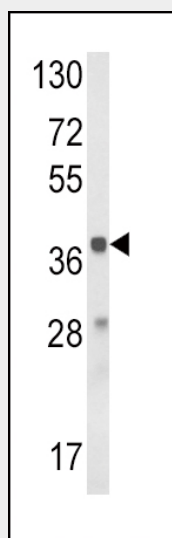
**Tissue Location**

Highly expressed in liver.

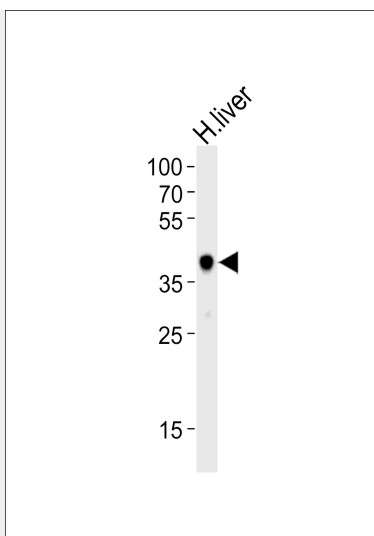
**HAO1 Antibody (Center) - Protocols**

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**

Western blot analysis of HAO1 Antibody (Center) (Cat. #AP8605c) in mouse liver tissue lysates (35ug/lane). HAO1 (arrow) was detected using the purified Pab.



Western blot analysis of lysate from human liver tissue lysate, using HAO1 Antibody (Center)(Cat. #AP8605c). AP8605c was diluted at 1:1000. A goat anti-rabbit IgG H&L(HRP) at 1:10000 dilution was used as the secondary antibody. Lysate at 35ug.

#### **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)