

# HAAO Antibody

Catalog # ASC10937

# Specification

# HAAO Antibody - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Isotype Application Notes WB, IHC, IF <u>P46952</u> NP\_036337, <u>188497625</u> Human, Mouse, Rat Rabbit Polyclonal IgG HAAO antibody can be used for detection of HAAO by Western blot at 1 μg/mL. Antibody can also be used for immunohistochemistry starting at 2.5 μg/mL. For immunofluorescence start at 20 μg/mL.

# HAAO Antibody - Additional Information

Gene ID Target/Specificity HAAO;

### **Reconstitution & Storage**

HAAO antibody can be stored at 4°C for three months and -20°C, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.

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#### Precautions

HAAO Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

### HAAO Antibody - Protein Information

Name HAAO {ECO:0000255|HAMAP-Rule:MF\_03019, ECO:0000312|HGNC:HGNC:4796}

Function

Catalyzes the oxidative ring opening of 3-hydroxyanthranilate to 2-amino-3-carboxymuconate semialdehyde, which spontaneously cyclizes to quinolinate.

**Cellular Location** Cytoplasm, cytosol.

HAAO Antibody - Protocols



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

- <u>Western Blot</u>
- <u>Blocking Peptides</u>
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

# HAAO Antibody - Images



Western blot analysis of HAAO in Mouse liver tissue lysate with HAAO antibody at 1 µg/mL.



Immunohistochemistry of HAAO in human liver tissue with HAAO antibody at 2.5 µg/mL.



Immunofluorescence of HAAO in Human Liver cells with HAAO antibody at 20 µg/mL.



# HAAO Antibody - Background

HAAO Antibody: HAAO (3-Hydroxyanthranilate 3, 4-dioxygenase) is a monomeric cytosolic protein of the family of intramolecular dioxygenases containing non-heme ferrous iron. It is widely distributed in peripheral organs, such as liver and kidney, and is present in low amounts in the central nervous system. This enzyme participates in tryptophan metabolism. It employs one cofactor, iron. HAAO catalyzes the synthesis of quinolinic acid (QUIN) from 3-hydroxyanthranilic acid. QUIN is an excitotoxin whose toxicity is mediated by its ability to activate glutamate N-methyl-D-aspartate receptors. Increased cerebral levels of QUIN may participate in the pathogenesis of neurological and inflammatory disorders. HAAO has been suggested to play a role in disorders associated with altered tissue levels of QUIN. Furthermore, recent study shows that HAAO are excellent candidate biomarkers for detecting ovarian cancer.

# **HAAO Antibody - References**

Decker RH, Kang HH, Leach FR, et al. Purification and properties of 3-hydroxyanthranilic acid oxidase. J. Biol. Chem.1961; 236:3076-82.

Huang YW, Jansen RA, Fabbri E, et al. Identification of candidate epigenetic biomarkers for ovarian cancer detection. Oncol. Rep.2009; 22:853-61.