

# **AOC3 Antibody (Center) Blocking Peptide**

Synthetic peptide Catalog # BP8538c

## **Specification**

## **AOC3 Antibody (Center) Blocking Peptide - Product Information**

Primary Accession

016853

# AOC3 Antibody (Center) Blocking Peptide - Additional Information

**Gene ID 8639** 

#### **Other Names**

Membrane primary amine oxidase, Copper amine oxidase, HPAO, Semicarbazide-sensitive amine oxidase, SSAO, Vascular adhesion protein 1, VAP-1, AOC3, VAP1

## **Target/Specificity**

The synthetic peptide sequence used to generate the antibody <a href=/products/AP8538c>AP8538c</a> was selected from the Center region of human AOC3. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

## **Format**

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

### Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

#### **Precautions**

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

## AOC3 Antibody (Center) Blocking Peptide - Protein Information

Name AOC3 (HGNC:550)

Synonyms VAP1

## **Function**

Catalyzes the oxidative deamination of primary amines to the corresponding aldehydes with the concomitant production of hydrogen peroxide and ammonia (PubMed:<a href="http://www.uniprot.org/citations/9653080" target="\_blank">9653080</a>, PubMed:<a href="http://www.uniprot.org/citations/19588076" target="\_blank">19588076</a>, PubMed:<a href="http://www.uniprot.org/citations/24304424" target="\_blank">24304424</a>). Has a preference for the primary monoamines methylamine and benzylamine (PubMed:<a href="http://www.uniprot.org/citations/9653080" target="\_blank">9653080</a>, PubMed:<a href="http://www.uniprot.org/citations/9653080" target="\_blank">19588076</a>). Could also act on 2-phenylethylamine but much less efficiently (PubMed:<a



Tel: 858.875.1900 Fax: 858.875.1999

href="http://www.uniprot.org/citations/19588076" target=" blank">19588076</a>). At endothelial cells surface can also function as a cell adhesion protein that participates in lymphocyte extravasation and recirculation by mediating the binding of lymphocytes to peripheral lymph node vascular endothelial cells in an L-selectin-independent fashion (PubMed:<a href="http://www.uniprot.org/citations/9653080" target="\_blank">9653080</a>, PubMed:<a href="http://www.uniprot.org/citations/9254657" target="blank">9254657</a>).

#### **Cellular Location**

Cell membrane; Single-pass type II membrane protein

#### **Tissue Location**

Strongly expressed on the high endothelial venules of peripheral lymph nodes and on hepatic endothelia. Also highly expressed in appendix, lung and small intestine. Expressed also in adipose tissue, in bone marrow, colon, heart, kidney, ovary, pancreas, placenta, prostate, skeletal muscle, spleen and testis. Isoform 2 seems to be the predominant transcript in fetal kidneys, fetal cartilage and fetal tonsils. The highest relative expression of isoform 2 occurs in skeletal muscle, heart, pancreas, kidney, and lung

# **AOC3 Antibody (Center) Blocking Peptide - Protocols**

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

### • Blocking Peptides

**AOC3 Antibody (Center) Blocking Peptide - Images** 

# AOC3 Antibody (Center) Blocking Peptide - Background

Copper amine oxidases catalyze the oxidative conversion of amines to aldehydes in the presence of copper and quinone cofactor. The product is a major protein on the adipocyte plasma membrane. It has adhesive properties and also has functional monoamine oxidase activity.

# **AOC3 Antibody (Center) Blocking Peptide - References**

Lalor, P.F., et.al., J. Immunol. 169 (2), 983-992 (2002) Salmi, M., et.al., Am. J. Pathol. 161 (6), 2255-2262 (2002)