

**AOC3 Antibody (Center)**  
**Affinity Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP8538c****Specification**

---

**AOC3 Antibody (Center) - Product Information**

Application	WB, IHC-P, FC,E
Primary Accession	<a href="#">Q16853</a>
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Antigen Region	613-640

**AOC3 Antibody (Center) - 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**

This AOC3 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 613-640 amino acids from the Central region of human AOC3.

**Dilution**

WB~~1:2000

IHC-P~~1:25

FC~~1:10~50

**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**

AOC3 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

**AOC3 Antibody (Center) - 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:[9653080](#), PubMed:[19588076](#), PubMed:[24304424](#)). Has a preference for the primary monoamines methylamine and benzylamine (PubMed:[9653080](#), PubMed:[19588076](#)). Could also act on 2-phenylethylamine but much less efficiently (PubMed:[19588076](#)). 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:[9653080](#), PubMed:[9254657](#)).

#### Cellular Location

Cell membrane; Single-pass type II membrane protein

#### Tissue Location

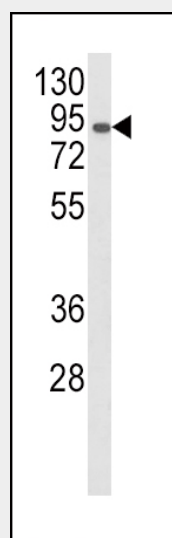
Strongly expressed on the high endothelial venules of peripheral lymph nodes and on hepatic endothelia. Also highly expressed in appendix, lung and small intestine. Expressed also in adipose tissue, in bone marrow, colon, heart, kidney, ovary, pancreas, placenta, prostate, skeletal muscle, spleen and 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) - Protocols

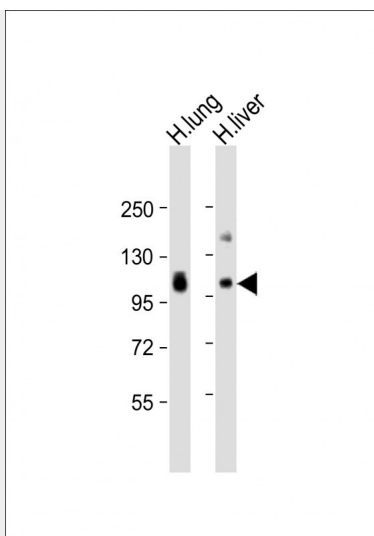
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

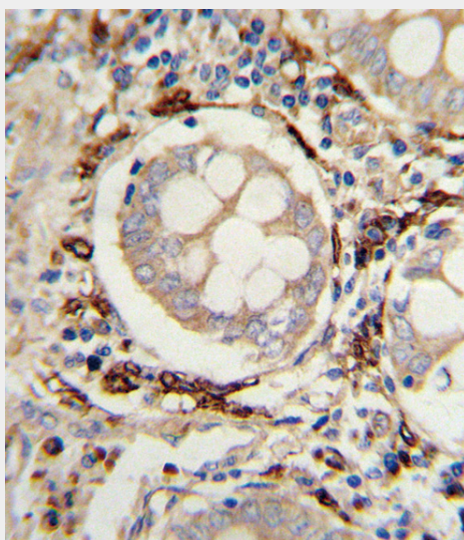
### AOC3 Antibody (Center) - Images



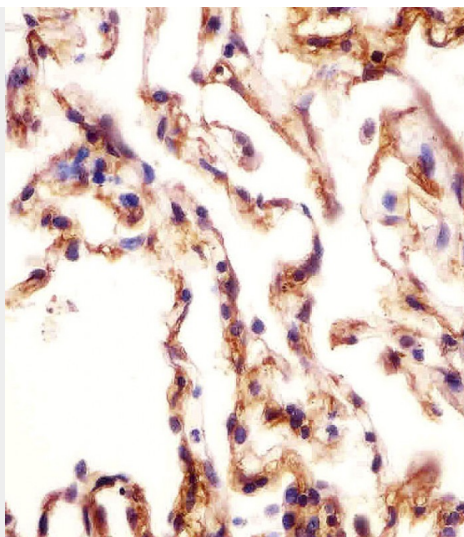
Western blot analysis of AOC3 Antibody (Center) (Cat. #AP8538c) in CEM cell line lysates (35ug/lane).AOC3 (arrow) was detected using the purified Pab.



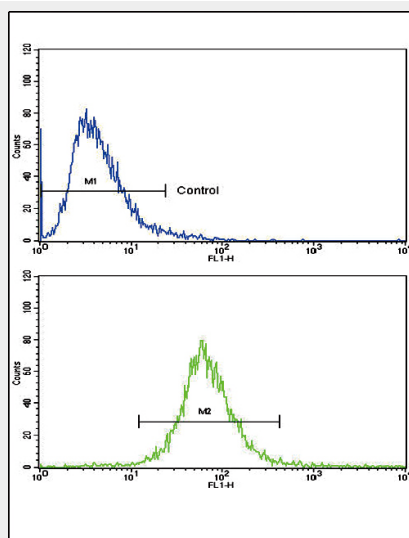
All lanes : Anti-AOC3 Antibody (Center) at 1:2000 dilution Lane 1: human lung lysate Lane 2: human liver lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 85 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



Formalin-fixed and paraffin-embedded human colon carcinoma with AOC3 Antibody (Center), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.



AP8538c staining AOC3 in human lung tissue sections by Immunohistochemistry (IHC-P - paraformaldehyde-fixed, paraffin-embedded sections). Tissue was fixed with formaldehyde and blocked with 3% BSA for 0.5 hour at room temperature; antigen retrieval was by heat mediation with a citrate buffer (pH6). Samples were incubated with primary antibody (1/25) for 1 hour at 37°C. A undiluted biotinylated goat polyvalent antibody was used as the secondary antibody.



Flow cytometric analysis of CEM cells using AOC3 Antibody (Center)(bottom histogram) compared to a negative control cell (top histogram). FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

### AOC3 Antibody (Center) - 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) - 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)