

# Recombinant human VAP-1/AOC3 protein

Catalog Number: ATGP3924

## PRODUCT INFORMATION

**Expression system**

Baculovirus

**Domain**

27-763aa

**UniProt No.**

Q16853

**NCBI Accession No.**

NP\_003725

**Alternative Names**

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

## PRODUCT SPECIFICATION

**Molecular Weight**

82.8 kDa (746aa)

**Concentration**

0.25mg/ml (determined by absorbance at 280nm)

**Formulation**

Liquid in. Phosphate-Buffered Saline (pH 7.4) containing 10% glycerol

**Purity**

> 90% by SDS-PAGE

**Endotoxin level**

< 1 EU per 1ug of protein (determined by LAL method)

**Tag**

His-Tag

**Application**

SDS-PAGE

**Storage Condition**

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

## BACKGROUND

**Description**

VAP-1, also known as membrane primary amine oxidase isoform 1, a copper amine oxidase with a topaquinone cofactor. It is 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-

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independent fashion. This protein plays a role in adipogenesis. It catalyzes the oxidative deamination of small primary amines such as methylamine, benzylamine, and aminoacetone in a reaction that produces an aldehyde, ammonia, and H<sub>2</sub>O<sub>2</sub>. Recombinant human VAP-1, fused to His-tag at C-terminus, was expressed in insect cell and purified by using conventional chromatography techniques.

## Amino acid Sequence

<ADP>GRGGDGG EPSQLPHCPV VSPSAQPWTH PGQSQLFADL SREELTAVMR FLTQRLGPGL VDAAQARPSD  
NCVFSVELQL PPKAAALAH DRGSPPARE ALAIVFFGRQ PQPNVSELVV GPLPHPSYMR DTVVERHGGP LPYHRRPVLF  
QEYLDIDQMI FNRELPQASG LLHHCCFYKH RGRNLVTMTT APRGLQSGDR ATWFGLYYNI SGAGFFLHHV GLELLVNHKA  
LDPARWTIQK VFYQGRYYDS LAQLEAQFEA GLVNVVLIPD NGTGGGWSLK SPVPPGPAPP LQFYPQGPRF SVQGSRVASS  
LWTFSGFLGA FSGPRIFDVR FQGERLVYEI SLQEALAIYG GNSPAAAMTTR YVDGGFGMGK YTTPLTRGVD CPYLATYVDW  
HFLLESQAPK TIRDAFCVFE QNQGFLRRH HSDLYSHYFG GLAETVLVVR SMSTLLNYDY VWDTVFHPSG AIEIRFYATG  
YISSAFLFGA TGKYGNQVSE HTLGTVHTHS AHFKVDLDVA GLENWVWAED MVFVPMAPVW SPEHQLQRLQ VTRKLEEMEE  
QAAFLVGSAT PRYLYLASNH SNKWGHPRGY RIQMLSFAE PLPQNSSMAR GFSWERYQLA VTQRKEEES SSSVFNQNDP  
WAPTVDSDS INNETIAGKD LVAWVTAGFL HIPHAEDIPN TVTVGNVGVF FLRPYNFFDE DPSFYSADSI YFRGDQDAGA  
CEVNPLACLP QAAACAPDLP AFSHGGGFSHN <HHHHHH>

## General References

Hsia LT., et al. (2016) Proc Natl Acad Sci U S A. 113:E2162-71  
Trivedi PJ., et al. (2018) Gut. 67:1135-1145

## DATA

### SDS-PAGE

3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain.

