

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 H₂O₂. 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 EPSQLPHCPS VSPSAQPWTH PGQSQLFADL SREELTAVMR FLTQRLGPGL VDAAQARPSD
 NCVFSVELQL PPKAAALAH LDRGSPPPARE ALAIVFFGRQ PQPNVSELVV GPLPHPSYMR DTVTVERHGGP LPYHRRPVLF
 QEYLDIDQMI FNRELPQASG LLHHCCFYKH RGRNLVTMTT APRGLQSGDR ATWFGLYYNI SGAGFFLHHV GLELLVNHKA
 LDPARWTIQK VFYQGRYYDS LAQLEAQFEA GLVNVVLIPD NGTGGGWSLK SPVPPGPAPP LQFYPOGPRF SVQGSRVASS
 LWTFSFGLGA FSGPRIFDVR FQGERLVYEI SLQEALAIYG GNSPAAMTTR YVDGGFGMGK YTTPLTRGVD CPYLATYVDW
 HFLLESQAPK TIRDAFCVFE QNQGLPLRRH HSDLYSHYFG GLAETVLVVR SMSTLLNYDY VWDTVFHPSG AIEIRFYATG
 YISSAFLFGA TGKYGNQVSE HTLGTVHTHS AHFKVDLDVA GLENWVWAED MVFVPMAPVW SPEHQLQRLQ VTRKLEEMEE
 QAAFLVGSAT PRYLYLASNH SNKWGHPRGY RIQMLSFAGE PLPQNSSMAR GFSWERYQLA VTQRKEEEPS SSSVFNQNDP
 WAPTVD FSD F INNETIAGKD LVAVWTAGFL HIPHAEDIPN TVTVGNGVGF FLRPYNFFDE DPSFYSADSI YFRGDQDAGA
 CEVNPLACL P QAAACAPDLP AFSHGGFSHN <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.

