

VAP-1, human recombinant

CATALOG #: 7210-10 10 µg
7210-50 50 µg

ALTERNATE NAMES: Vascular Adhesion Protein-1, AOC3, SSAO, HPAO, Copper Amine Oxidase, Membrane Primary Amine Oxidase

SOURCE: CHO cells

PURITY: ≥ 95% by SDS-PAGE gel and HPLC analyses

MOL. WEIGHT: ~80.0 kDa

ENDOTOXIN LEVEL: < 0.1 ng/µg of protein (<1 EU/µg).

FORM: Lyophilized

FORMULATION: Sterile filtered through a 0.2 micron filter. Lyophilized from 10 mM Sodium Phosphate, pH 7.8.

STORAGE CONDITIONS: Store at -20°C. After reconstitution, aliquot and store at -20°C to -80°C. Avoid repeated freezing and thawing cycles.

RECONSTITUTION: Centrifuge the vial prior to opening. Reconstitute in water to a concentration of 0.1-1.0 mg/ml. Do not vortex. This solution can be stored at 2-8°C for up to 1 week. For extended storage, it is recommended to further dilute in a buffer containing a carrier protein (example 0.1% BSA) and store in working aliquots at -20°C to -80°C.

DESCRIPTION: VAP-1 is a type II membrane cell adhesion protein belonging to the copper/topaquinone oxidase family. It is primarily expressed on the high endothelial venules of peripheral lymph nodes and on hepatic endothelia. VAP-1 can catalyze the oxidative deamination of low molecular weight amines, and plays an important role in the migration of lymphocytes to inflamed tissue. Inhibition of VAP-1 can protect against inflammation related damage to certain injured tissues. Additionally, VAP-1 can function as a significant prognostic marker for certain cancers and cardiovascular diseases. Recombinant VAP-1 is a mixture of

monomeric and disulfide linked homodimeric forms of a 737 amino acid polypeptide corresponding to amino acids 27 to 763 of the VAP-1 precursor.

AMINO ACID SEQUENCE:

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GRGGDGGEPS  QLPHCPSVSP  SAQPWTHPGQ  SQLFADLSRE  ELTAVMRFLT
QRLGPGLVDA  AQARPSDNCV  FSVELQLPPK  AAALAHLDGRG  SPPPAREALA
IVFFGRQPQP  NVSELVVGPL  PHSYMRDVT  VERHGGPLPY  HRRPVLFQEY
LDIDQMIFNR  ELPQASGLLH  HCCFYKHRGR  NLVTMTTAPR  GLQSGDRATW
FGLYINISGA  GFFLHHVGLE  LLVNHKALDP  ARWTIQKVFY  QGRYYDSLAQ
LEAQFEAGLV  NVVLIPDNGT  GGSWSLKSPV  PPGPAPPLQF  YPQGPRFSVQ
GSRVASSLWT  FSFGLGAFSG  PRIFDVRFQG  ERLVYEISLQ  EALAIYGGNS
PAAMTTRYVD  GGFGMGKYTT  PLTRGVDCPY  LATYVDWHFL  LESQAPKTIR
DAFCVFEQNG  GLPLRRHSD  LYSHYFGGLA  ETVLVRSMS  TLLNYDYVWD
TVFHPGAIE  IRFYATGYIS  SAFLFGATGK  YGNQVSEHTL  GTVHTSAHF
KVDLDVAGLE  NWWWAEDMVF  VPMVPWSPE  HQLQRLQVTR  KLEEMEEQAA
FLVGSATPRY  LYLASNHSNK  WGHPRGYRIQ  MLSFAGEPLP  QNSSMARGFS
WERYQLAVTQ  RKEEPPSSSS  VFNQNDPWAP  TVDFSDFINN  ETIAGKDLVA
WVTAGFLHIP  HAEDIPNTVT  VGNGVGFFLR  PYNFFDEDPS  FYSADSIYFR
GDQDAGACEV  NPLACLQAAA  ACAPDLPAFS  HGGFESHN
    
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BIOLOGICAL ACTIVITY: Measured by its ability to produce hydrogen peroxide during the oxidation of benzylamine. The specific activity is >16 pmoles/min/µg of VAP-1.

RELATED PRODUCTS:
Growth Factors and Cytokines
Proteins and Enzymes

FOR RESEARCH USE ONLY! Not to be used in humans.

