

VAP-1, human recombinant protein

Vascular Adhesion Protein-1, AOC3, SSAO, HPAO, Copper Amine Oxidase, Membrane
Primary Amine Oxidase
Catalog # PBV10840r

Specification**VAP-1, human recombinant protein - Product info**

Primary Accession [Q16853](#)
Calculated MW ~80.0 kDa KDa

VAP-1, human recombinant protein - Additional Info

Gene ID **8639**
Gene Symbol **VAP1**

Other Names

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

Gene Source **Human**
Source **CHO cells**
Assay&Purity **SDS-PAGE; ≥95%**
Assay2&Purity2 **HPLC;**
Recombinant **Yes**
Sequence **GRGGDGGGEPS QLPHCPSVSP SAQPWTHPGQ
SQLFADLSRE ELTAVMRFLT QRLGPGLVDA
AQARPSDNCV FSVELQLPPK AAALAHLDRG
SPPPARREALA IVFFGRQPQP NVSELVVGPL
PHPSYMRDVT VERHGGPLPY HRRPVLFQEY
LDIDQMIFNR ELPQASGLLH HCCFYKHRGR
NLVTMTTAPR GLQSGDRATW FGLYYNISGA
GFFLHHVGLE LLVNHKALDP ARWTIQKVFY
QGRYYDSLAQ LEAQFEAGLV NVVLIPDNGT
GGSWSLKSPV PPGPAPPLQF YPQGPRFSVQ
GSRVASSLWT FSFGLGAFSG PRIFDVRFQG
ERLVYEISLQ EALAIYGGNS PAAMTTRYVD
GGFGMGKYTT PLTRGVDCPY LATYVDWHFL
LESQAPKTIR DAFCVFEQNQ GLPLRRHHSD
LYSHYFGGLA ETVLVVRSMS TLLNYDYVWD
TVFHPSGAIE IRFYATGYIS SAFLFGATGK
YGNQVSEHTL GTVHTHSAHF KVDLDVAGLE
NWWAEDMVF VPMVPWSPE
HQLQRLQVTR KLEEMEEQAA FLVGSATPRY
LYLASNHSNK WGHPRGYRIQ MLSFAGEPLP
QNSSMARGFS WERYQLAVTQ RKEEPPSSSS
VFNQNDPWAP TVDFSDFINN ETIAGKDLVA
WVTAGFLHIP HAEDIPNTVT VGNGVGFFLR
PYNFFDEDPS FYSADSIYFR GDQDAGACEV
NPLACLPQAA ACAPDLPAFS HGGFSHN**

Target/Specificity
VAP1

Application Notes

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.

Format

Lyophilized powder

Storage

-20°C; Sterile filtered through a 0.2 micron filter. Lyophilized from 10 mM Sodium Phosphate, pH 7.8.

VAP-1, human recombinant protein - 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](#)

VAP-1, human recombinant protein - Images**VAP-1, human recombinant protein - Background**

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.

VAP-1, human recombinant protein - References

Zhang X., et al. Gene 179:279-286(1996).
Smith D.J., et al. J. Exp. Med. 188:17-27(1998).
Zhang Q., et al. Gene 318:45-53(2003).
Kaitaniemi S., et al. PLoS ONE 8:E54151-E54151(2013).
Ota T., et al. Nat. Genet. 36:40-45(2004).