

Product datasheet for **RC208516**

VAP1 (AOC3) (NM_003734) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	VAP1 (AOC3) (NM_003734) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	VAP1
Synonyms:	HPAO; SSAO; VAP-1; VAP1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>RC208516 representing NM_003734
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**GCGATCGCC**

ATGAACCAGAAGACAATCCTCGTCTCCTATTCTGGCCGTATCACCATCTTTGCCTTGGTTTGTGTCC
 TGCTGGTGGGCAGGGGTGGAGATGGGGGTGAACCCAGCCAGCTTCCCCATTGCCCTCTGTATCTCCAG
 TGCCAGCCTTGACACACCCTGGCCAGAGCCAGCTGTTTGCAGACCTGAGCCGAGAGGAGCTGACGGCT
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 CCGCTGGACTATCCAGAAGGTGTTCTATCAAGGCCGCTACTACGACAGCCTGGCCAGCTGGAGGCCAG
 TTTGAGGCCGGCTGGTGAATGTGGTGTGATCCAGACAATGGCACAGGTGGGTCTGGTCCCTGAAGT
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 AAGTCGAGTGGCTCCTCACTGTGGACTTCTCCTTTGGCCTCGGAGCATTCAAGTGGCCCAAGGATCTTT
 GACGTTTCGCTTCCAAGGAGAAAGACTAGTTTATGAGATAAGCCTCCAAGAGGCCCTGGCCATCTATGGTG
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ACGCGTACGCGGGCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC208516 representing NM_003734
 Red=Cloning site Green=Tags(s)

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MNQKTILVLLILAVITIFALVCVLLVGRGGDGGEPQLPHCPSPVSPAQPWTHPGSQFLFADLSREELTA
VMRFLTQRLGGLVDAQAQARPSDNCVFSVELQLPPKAAALAHLDRGSPPPAREALAIVFFGRQPQPNVSE
LVVGPLPHPSYMRDVTVERHGGPLPYHRRPVLFQEYLDIDQMI FNREL PQASGLLHHCCFYKHRGRNLVT
MTTAPRGLQSGDRATWFLYNYISGAGFFLHHVGLLELVNHKALDPAWRTIQKVFYQGRYYDSL AQLAQ
FEAGLVNVVLI PDNGTGGSWSLKSPVPPGAPPLQFYYPQGPFRFSVQGSRVASSLWTF SFGLGAFSGPRIF
DVRFQGERLVYEISLQEALAIYGGNSPAAMTTRYVDGGFGMGKYTTPLTRGVDPCPYLATYVDWHFLESQ
APKTIRD A F CVFEQNQGLPLRRHSDLYSHYFGGLAETVLVVRSMSTLLNYDVVWDTVFHPGSAIEIRFY
ATGYISSAFLFGATGKYGNQVSEHTLGTVHTSAHFKVDLDVAGLENWVAEDMVFPMAVPWSPEHQLQ
RLQVTRKLL E MEEQA A FLVGSATPRYL Y LASNHSNKWGHPRGYRIQMLSFAGEPLPQNSSMARGFSWERY
QLAVTQRKEE P SSSSVFNQNDPWAPT VDF SDF INNETIAGKDL VAWVTAGFLHIPHAEDIPNTVTVNGN
VGFFLRPNYNFDEDP SFYSADSIYFRGDQDAGACEVNPLACL PQAACAPDLPAF SHGGF SHN
  
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TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mg2602_h01.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_003734

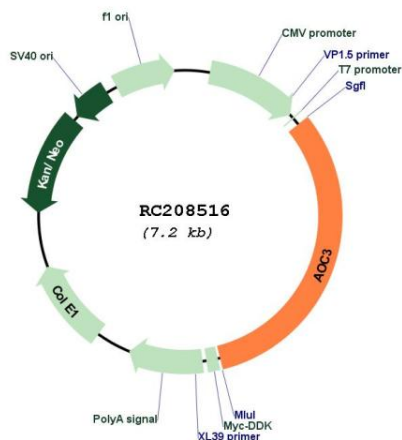
ORF Size: 2289 bp

OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

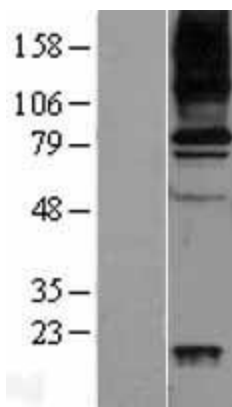
OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

Components:	The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).
Reconstitution Method:	<ol style="list-style-type: none">1. Centrifuge at 5,000xg for 5min.2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.3. Close the tube and incubate for 10 minutes at room temperature.4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.
Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	NM_003734.4
RefSeq Size:	4040 bp
RefSeq ORF:	2292 bp
Locus ID:	8639
UniProt ID:	Q16853
Cytogenetics:	17q21.31
Protein Families:	Transmembrane
Protein Pathways:	beta-Alanine metabolism, Glycine, serine and threonine metabolism, Metabolic pathways, Phenylalanine metabolism, Tyrosine metabolism
MW:	84.4 kDa
Gene Summary:	This gene encodes a member of the semicarbazide-sensitive amine oxidase family. Copper amine oxidases catalyze the oxidative conversion of amines to aldehydes in the presence of copper and quinone cofactor. The encoded protein is localized to the cell surface, has adhesive properties as well as monoamine oxidase activity, and may be involved in leukocyte trafficking. Alterations in levels of the encoded protein may be associated with many diseases, including diabetes mellitus. A pseudogene of this gene has been described and is located approximately 9-kb downstream on the same chromosome. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Apr 2013]

Product images:



Circular map for RC208516



Western blot validation of overexpression lysate (Cat# [LY401227]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC208516 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).