EMPOWER YOUR RESEARCH

## Product datasheet for SC112318

## VKORC1 (NM_024006) Human Untagged Clone

## Product data:

## Product Type:

Product Name:

## Tag:

Symbol:
Synonyms:
Mammalian Cell
Selection:
Vector:
E. coli Selection:

Fully Sequenced ORF:

5' Read Nucleotide
Sequence:

Expression Plasmids
VKORC1 (NM_024006) Human Untagged Clone
Tag Free
VKORC1
EDTP308; MST134; MST576; VKCFD2; VKOR
None
pCMV6-XL4
Ampicillin ( $100 \mathrm{ug} / \mathrm{mL}$ )
>OriGene ORF sequence for NM_024006 edited ATGGGCAGCACCTGGGGGAGCCCTGGCTGGGTGCGGCTCGCTCTTTGCCTGACGGGCTTA GTGCTCTCGCTCTACGCGCTGCACGTGAAGGCGGCGCGCGCCCGGGACCGGGATTACCGC GCGCTCTGCGACGTGGGCACCGCCATCAGCTGTTCGCGCGTCTTCTCCTCCAGGTGGGGC AGGGGTTTCGGGCTGGTGGAGCATGTGCTGGGACAGGACAGCATCCTCAATCAATCCAAC AGCATATTCGGTTGCATCTTCTACACACTACAGCTATTGTTAGGTTGCCTGCGGACACGC TGGGCCTCTGTCCTGATGCTGCTGAGCTCCCTGGTGTCTCTCGCTGGTTCTGTCTACCTG GCCTGGATCCTGTTCTTCGTGCTCTATGATTTCTGCATTGTTTGTATCACCACCTATGCT ATCAACGTGAGCCTGATGTGGCTCAGTTTCCGGAAGGTCCAAGAACCCCAGGGCAAGGCT AAGAGGCACTGA
>OriGene 5' read for NM_024006 unedited
TATAGGCGGCCGCGGCCCGGCCCCTGCTCCGTGGCTGGTTTTCTCCGCGGGCGCCTCGGG CGGAACCTGGAGATAATGGGCAGCACCTGGGGGAGCCCTGGCTGGGTGCGGCTCGCTCTT TGCCTGACGGGCTTAGTGCTCTCGCTCTACGCGCTGCACGTGAAGGCGGCGCGCGCCCGG GACCGGGATTACCGCGCGCTCTGCGACGTGGGCACCGCCATCAGCTGTTCGCGCGTCTTC TCCTCCAGGTGGGGCAGGGGTTTCGGGCTGGTGGAGCATGTGCTGGGACAGGACAGCATC CTCAATCAATCCAACAGCATATTCGGTTGCATCTTCTACACACTACAGCTATTGTTAGGT TGCCTGCGGACACGCTGGGCCTCTGTCCTGATGCTGCTGAGCTCCCTGGTGTCTCTCGCT GGTTCTGTCTACCTGGCCTGGATCCTGTTCTTCGTGCTCTATGATTTCTGCATTGTTTGT ATCACCACCTATGCTATCAACGTGAGCCTGATGTGGCTCAGTTTCCGGAAGGTCCAAGAA CCCCAGGGCAAGGCTAAGAGGCACTGAGCCCTCAACCCAAGCCAGGCTGACCTCATCTGC TTTGCTTTGGCATGTGAGCCTTGCCTAAGGGGGCATATCTGGGTCCCTAGAAGGCCCTAG ATGTGGGGCTTCTAGATTACCCCCTCCTCCTGCCATACCCGCACATGACAATGGACCAAA TGTGCCACACGCTCGCTCTTTTTTACACCCAGTGCCTCTGACTCTGTCCCCATGGGCTGG TCTCCAAAGCTCTN

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| 3' Read Nucleotide | >OriGene 3' read for NM_024006 unedited |
| :---: | :---: |
| Sequence: | NNNCCACTTGNACCCGGCCGCATTCTANGATCGAGTTTTTTTTTTTTTTTTTTTTTTTTT |
|  | TTTTTTTTTTTTTTTTTGATTGATCTAAAAAACTTTATTGCTCAAAACCTTCCCTCCCTG |
|  | GGCAATGGAAAAAGCTTTGGAAACCACCCCATGGGGACAAAGTCAAAGGCACTGGGTGTA |
|  | AAAAAAAACGAGCGTGGGGCACATTTGGTCCATTGTCATGTGCGGGTATGGCAAGAGGAG |
|  | GGGGTAATTTAAAAACCCCACATTTAGGGCCTTTTAGGGACCCAAATATGCCCCCTTAGG |
|  | CAAGGGTCACATGCCAAAGCAAAGCAAATGAGGGCAACCTGGCTTGGGTTGAGGGCTCAA |
|  | TGCCTTTTAACCTTGCCCTGGGGTTCTTGGACCTTTCGGAAACTGAGCCACATTAGGCTC |
|  | ACGTTGATAGCATAGGGGGGGATACAAACAATGCCGAAATCATTGAGCACGAAAAACAGG |
|  | ATCCAGGCCAGGTAAACAGAACCAGCGAGAGACACCAGGGAGCTCAACAGCATTAGGACA |
|  | GAGGCCCAGCGTGTCCGCAGGCAACCTAACAATAGCTGTAGTGTGTAAAAAATGCAACCC |
|  | AATATGCTGTTGGATTGATTGAGGATGCTGTCCTGTCCCAGCACATGCTTCACCAGCCCG |
|  | AAACCCCTGCCCCACCTGGAGGAGAAGACGCGCGAACAGCTGATGGCGGTGCCCACGTCG |
|  | CAAAGCGCGCGGTAATCCCGGTCCGGGCGCGCGCCCGCTTCACGTGCAANGCGTAAAGCG |
|  | AGACACTTAACCCCGTCAGCAAAGAACGAGCCGCACCCACCAGGGCTCCCCCCAGTGGCT |
|  | GCCATTATCTTCAGNTNCGGCCGAGGCGCCCGCGNAGAAACAACCCGGAACAGGGGCCCGG |
|  | GCCCGGCCGNCCTATAGGAGGTCGATACAAATTTTGAAGTTCACTAAAGAACTCTGTTTT |
|  | TT |
| Restriction Sites: | Notl-Notl |
| ACCN: | NM_024006 |
| Insert Size: | 850 bp |
| OTI Disclaimer: | Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP). |
| 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: | 1. Centrifuge at 5,000xg for 5 min . |
|  | 2. Carefully open the tube and add 100 ul 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 5000 xg ) to concentrate the liquid at the bottom. |
|  | 5. Store the suspended plasmid at $-20^{\circ} \mathrm{C}$. The DNA is stable for at least one year from date of shipping when stored at $-20^{\circ} \mathrm{C}$. |
| RefSeq: | NM 024006.4, NP 076869.1 |
| RefSeq Size: | 1042 bp |
| RefSeq ORF: | 492 bp |
| Locus ID: | 79001 |
| UniProt ID: | Q9BQB6 |
| Cytogenetics: | 16p11.2 |
| Protein Families: | Transmembrane |

This gene encodes the catalytic subunit of the vitamin $K$ epoxide reductase complex, which is responsible for the reduction of inactive vitamin K 2,3-epoxide to active vitamin $K$ in the endoplasmic reticulum membrane. Vitamin $K$ is a required co-factor for carboxylation of glutamic acid residues by vitamin K-dependent gamma-carboxylase in blood-clotting enzymes. Allelic variation in this gene is associated with vitamin k-dependent clotting factors combined deficiency of 2 , and increased resistance or sensitivity to warfarin, an inhibitor of vitamin $K$ epoxide reductase. Pseudogenes of this gene are located on chromosomes 1 and $X$. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Aug 2015] Transcript Variant: This variant (1) lacks an alternate in-frame exon compared to variant 3. It encodes isoform 1, which is shorter than isoform 3.

