

Product datasheet for MR206382

Vat1 (NM_012037) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Vat1 (NM_012037) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Vat1
Synonyms:	VAT-1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>MR206382 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGTCCGCGGAGAGGGAAGCAGCTGAGGCGGCCACTGTGGCAGCGGCGACCGAGGCCGGGGCGGAGACCG
GGACCGGAGCCGGGGAGGGTGCCTTCGACGCCCGACAGTCGAGGTGGCAAGCGACCCGAGCCACC
CCCGGCCCGGAAGCGTCAGCATCCGCTTCGGCACCGCCACTGCGCTGCCTGGTACTCACCGCTTCGGT
GGCTACGATAAAGGTGAAGCTGCAGAGCCGCGCGGTGCCCGGCCCAAGGGCTGTACGACCGACTACC
TGCGCGTGCAGCCTGTGGGCTCAACTTCGCCGACCTCATGGCCGCCAAGGGCTGTACGACCGACTACC
GCCTCTGCCGGTACCCCGGCATGGAGGGCGCGGGCTGGTAGTGGCAGTGGGCAAGGCGTCGGCGAC
CGTAAGGCAGGGGATCGGGTGTGGTGAACCGGTCAGGGATGTGGCAGGAGGAAGTAAGTGTGCCAT
CAGCCCAGACTTTCCTGATGCCTGAGGCCATGACCTTGAAGAAGCTGCTGCCTTGTGGTCAATTATAT
CACCGCTACATGGTCTCTTTGACTTCGGCAACCTGAGACCGGGCCATAGCGTCTTGGTACACATGGCT
GCAGGTGGCGTGGGCATGGCAGCCCTGCAGTTGTGCCGACCGTGGAGAAGCTGACAGTGTGGAAACGG
CCTCAGCCAGCAAGCAGGAGTGTGAAGGAGAACGGGTCACACACCCCATCGACTACCACAGACTGA
CTATGTGGACGAGATCAAAAAGATCTCCCCAAAGGAGTAGACATCGTCATGGACCCTCTGGGTGGATCA
GACACGGCAAGGGCTACCACCTCCTCAAACCCATGGGCAAAGTTGTCACTTACGGAATGGCTAACCTGC
TGACGGGCCCAAGCGGAACCTGATGGCCATGGCCCGCACCTGGTGGAAATCAGTTCAAGTGTGACAGCTCT
GCAGCTGTGCAGGCCAACCGAGCTGTGTGGCTTCCACCTGGGCTACCTGGATGGAGAGGTGGAACCTC
GTCAATAGCGTGGTACCCGCTCGTGGCTCTGTACAATCAGGGCCACATCAAACCTCGAATTGACTCAG
TCTGGCCCTTCGAGAAGGTGGCAGATGCAATGAAACAGATGCAGGAGAAGAACAATAGGCAAAGTCTCT
CCTGGTCTCGGGCTGAGAAGGAGACC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >MR206382 protein sequence
Red=Cloning site Green=Tags(s)

```
MSAEREAAEAATVAAATEAGAETGTGAGEGAPSPPTVEVASDPQPPAPEASASASAPPLRCLVLTGFG
GYDKVKLQSRPAVPPAPGPGQLTLRVRACGLNFADLMGRQGLYDRLPPLPVTGMEGAGVVAVGEGVGD
RKAGDRVMVNLNRSGMWQEEVTVPSAQTFLMPEAMTFEEAAALLVNYITAYMVLDFDGNLRPGHSLVHMA
AGGVGMAALQLCRTVENVTVFGTASASKHEVLKENGVTHPIDYHTTDYVDEIKKISPKGVDIVMDPLGGS
DTAKGYHLLKPMGKVVTYGMANLLTGPKRNLAMARTWWNQFSVTALQLLQANRAVCGFHLGYLDGEVEL
VNSVVTRLVALYNQGHKPRIDSVWPFKIVADAMKQMQEKKNIGKVLLVPGPEKET
```

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_012037

ORF Size: 1221 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:

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.

RefSeq: [NM_012037.2](#), [NP_036167.1](#)

RefSeq Size: 2732 bp

RefSeq ORF: 1221 bp

Locus ID: 26949

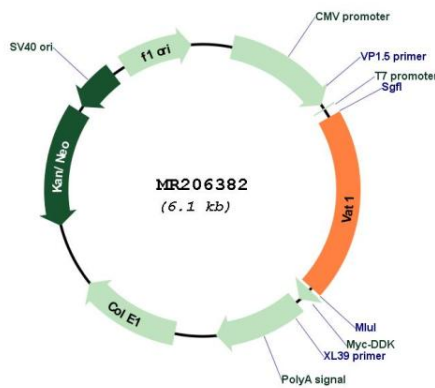
UniProt ID: [Q62465](#)

Cytogenetics: 11 D

MW: 43.1 kDa

Gene Summary: Plays a part in calcium-regulated keratinocyte activation in epidermal repair mechanisms. Has no effect on cell proliferation (By similarity). Possesses ATPase activity. Negatively regulates mitochondrial fusion in cooperation with mitofusin proteins (MFN1-2) (By similarity). [UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR206382