

Product datasheet for **RR204721**

Vat1 (NM_001033683) Rat Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Vat1 (NM_001033683) Rat Tagged ORF Clone
Tag: Myc-DDK
Symbol: Vat1
Synonyms: MGC124668
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
ORF Nucleotide Sequence: >RR204721 representing NM_001033683
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGTCGGCGGAGAGGGAGGCAACCGAGGCGGCTACTGTGGCGGCGGCAGCCGAGGCCCGGGCGGAGACCG
 GAGCAGGGGAGGGTGCCTTCGCAACCCCGACCGTGCAGGTGGCGAGCGACCCGAGCCGCCACCGGC
 CCCCAGCGTCGGCATCCGCTCGGCTCCGCCACTTCGTCGCCTGGTACTACCGGCTTCGGTGGCTAC
 GATAAAGTGAAGCTGCAGAGCCGACCGGGTGCCTCCGCGCCCGGGTCCCGGTCAGGTGACGCTCGGG
 TGGGAGCTGCGGCTCAACTTTGCCGACCTCATGGCCGCCAGGGGCTGTACGACCGGCTGCCGCTCT
 GCCGGTACCCCGGCATGGAGGCGCGGGCGTGGTGGTGGCCGTGGGCGAGGGTGTGACGACCGTAAG
 GCAGGGGATAGGGTGTGGTGTGAACCGTCAAGGATGTGGCAGGAGGAAGTACTGTGCCATCAGCCC
 AGACTTTCCTGATGCCGGAGGCCATGACTTTTGAGGAAGCTGCTGCCTTGTGGTCAATTATACCCGC
 CTACATGGTTCTCTTTGACTTCGGCAACCTAAGACCCGGCCACAGCGTCTTGGTACACATGGCTGCAGGT
 GGTGTTGGCATGGCAGCCCTGCAGTTATGCCGCACCGTGGAGAACGTGACAGTGTTCGGAACGGCCTCAG
 CCAGCAAGCATGAGGTGCTGAAGGAGAACGGGTACACACCCCATCGACTACCACGACTGACTATGT
 GGATGAGATCAAAAAGATCTCCCCAAAGGAGTAGACATCGTCATGGACCCTCTGGGTGGTCCGACACT
 GCGAAGGGCTACCACCTTCTCAAACCCATGGGCAAAGTTGTCACTTACGGAATGGCAACCTGCTGACCG
 GCCCAAGCGGAACCTGATGGCCATGGCCCGCACCTGGTGAATCAGTTCAAGTGTGACAGCTCTGCAGCT
 GCTGCAGGCCAACCGAGCTGTGTGCGGCTTCCACCTGGGCTACCTGGACGGTGGAGTGGAGCTCGTCACT
 AGAGTGGTTACCCACCTCCTGGCTCTGTACAATCAGGGCCACATCAAACCCGAATCGACTCAGTCTGGC
 CCTTCGAGAAGGTGGCTGATGCCATGAGGCAGATGCAGGAGAAGAAAAACATAGGCAAAGTCTCTTGGT
 TCCTGGGCTGAGAAGGAGACC

ACGGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RR204721 representing NM_001033683
 Red=Cloning site Green=Tags(s)

MSAEREATEAATVAAAAEARAETGAGEGAPSQPPTVEVASDPQPPPAPEASASASAPPLRCLVLTGFGGY
 DKVKLQSRPAVPPAPGPGQVTLRVACGLNFADLMGRQGLYDRLPPLPVTGMEGAGVVAVGEGVSDRK
 AGDRVMVLNRSQMWQEEVTVPSAQTFLLMPEAMTFEEAALLVNYITAYMVLDFGNLRPGHSVLVHMAAG
 GVGMAALQLCRTVENVTVFGTASASKHEVLKENGVTHTPIDYHTTDYVDEIKKISPKGVDIVMDPLGSDT
 AKGYHLLKPMGKVVTYGMANLLTGPKRNLAMAMARTWVNQFSVTALQLLQANRAVCGFHLGYLDGEVELVS
 RVVTHLLALYNQGHKPRIDSVWPFKVDAMRQMQEKKNIGKVLLVPGPEKET

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

Sgfl-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_001033683

ORF Size: 1212 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_001033683.1](#), [NP_001028855.1](#)

RefSeq Size: 2628 bp

RefSeq ORF: 1215 bp

Locus ID: 287721

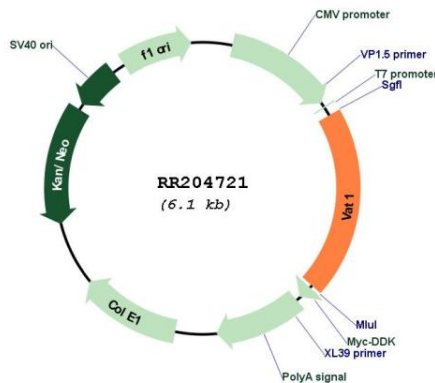
UniProt ID: [Q3MIE4](#)

Cytogenetics: 10q31

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. May negatively regulate mitochondrial fusion.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for RR204721