

Product datasheet for **RG202201**

VAT1 (NM_006373) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	VAT1 (NM_006373) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	VAT1
Synonyms:	VATI
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG202201 representing NM_006373 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGTCGACGAGAGAGAGGTAGCCGAGGCAGCGACCGGGGAAGACGCCTCTTCGCCGCTCCGAAAACCG
AGGCAGCGAGCGACCCCCAGCATCCCGCGGCTCCGAAGGGGCCCGCCGCCCGCTCGCCGCACT
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TGGCTAGGCAGGGGCTGTACGACCGTCTCCCGCTCTGCCTGTCACTCCGGGCATGGAGGGCGGGGTGT
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AGGAAGCTGCTGCCTTGCTCGTCAATTACATTACAGCCTACATGGTCTCTTTGACTTCGGCAACCTACA
GCCTGGCCACAGCGTCTTGGTACACATGGCTGCAGGGGTGTGGGTATGGCTGCCGTGCAGCTGTGCCGT
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TCACACATCCCATCGACTATCACAGGACTGACTACGTGGATGAGATCAAGAAGATTTCCCTAAAGGAGT
GGCATTGTGATGACCCCTCTGGGTGGTCAAGTACTGCCAAGGGCTACAACCTCCTGAAACCCATGGGC
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CATGGTGGAAATCAGTTCAGCGTGACAGCTCTGCAGCTGCTGCAGGCCAACCGGGCTGTGTGTGGCTTCCA
CCTGGGCTACCTGGATGGTGGGTGGAGCTGGTCAAGTGGTGTGGTGGCCCGCTCCTGGCTCTGTACAAC
CAGGGCCACATCAAGCCCCACATTGACTCAGTCTGGCCCTTCGAGAAGGTGGCTGATGCCATGAAACAGA
TGCAGGAGAAGAAGAATGTGGCAAGGTCTCCTGTTCCAGGGCCAGAGAAGGAGAAC

AGCGGACCGACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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Protein Sequence: >RG202201 representing NM_006373
 Red=Cloning site Green=Tags(s)

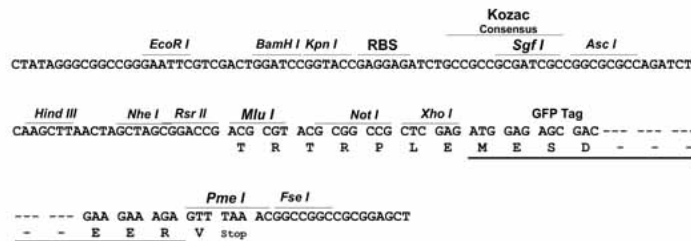
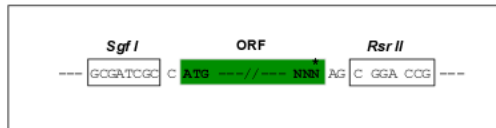
MSDEREVAEAAATGEDASSPPPKTEAASDPQHPAASEGAAAAASPPLLRLCLVLTGFGGYDKVKLQSRPAA
 PPAPGPGQLTLRLRACGLNFADLMARQGLYDRLPPLPVTPGMEGAGVVIIVGEGVSDRKAGDRVMVNLNRS
 GMWQEEVTVPSVQTFLIPEAMTFEEAAALLVNYITAYMVLDFDGNLQPGHSVLVHMAAGGVGMAAVQLCR
 TVENVTVFGTASASKHEALKENGVTHTPIDYHTTDYVDEIKKISPKGVDI VMDPLGGSDTAKGYNLLKPMG
 KVVITYGMANLLTGPKRNLMLARTWNNQFSVTALQLLQANRAVCGFHLGYLDGEVELVSGVVARLLALYN
 QGHIKPHIDSVWPFKQVADAMKQMQEKKNVGKVLVLPGEKEN

SGPTRRRLE - GFP Tag - V

Restriction Sites: SgfI-RsrII

Cloning Scheme:

Cloning sites used for ORF Shuttling:



ACCN: NM_006373

ORF Size: 1179 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_006373.4](#)

RefSeq Size: 2758 bp

RefSeq ORF: 1182 bp

Locus ID: 10493

UniProt ID: [Q99536](#)

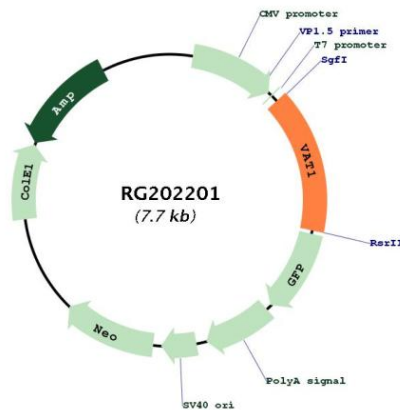
Cytogenetics: 17q21.31

Domains: ADH_zinc_N

Protein Families: Druggable Genome

Gene Summary: Synaptic vesicles are responsible for regulating the storage and release of neurotransmitters in the nerve terminal. The protein encoded by this gene is an abundant integral membrane protein of cholinergic synaptic vesicles and is thought to be involved in vesicular transport. It belongs to the quinone oxidoreductase subfamily of zinc-containing alcohol dehydrogenase proteins. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RG202201