

Product datasheet for **RG221148**

VMAT1 (SLC18A1) (NM_003053) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	VMAT1 (SLC18A1) (NM_003053) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	VMAT1
Synonyms:	CGAT; VAT1; VMAT1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>RG221148 representing NM_003053
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGCTCCGGCCATTCTGGATGCTCCCCAGCGTTGCTGAAGGAGGGGAGAGCGTCCCGCAGCTGGTGC
 TGGTGGTGGTATTGTCGCTTTGCTCCTGGACAACATGCTGTTTACTGTGGTGGTCCAATTGTGCCAC
 CTTCTATATGACATGGAGTTCAAAGAAGTCAACTCTTCTGCACTCGGCCATGCCGGAAGTCCCA
 CATGCCCTCGCTCTCTGCCTTTCCACCATCTTCTCCTTCTCAACAACAACACCGTGGCTGTTGAAG
 AAAGCGTACCTAGTGGAAAGCATGGATGAATGACACTGCCAGCACCATCCACCTCCAGCCACTGAAGC
 CATCTCAGCTCATAAAAACAACCTGCTTGAAGGCACAGTTTCTGGAGGAAGAGACTACCCGGTCCGG
 GTTCTGTTGCTCAAAGGCTGTGATGCAACTTGGTCAACCCATTGTTGGGCCCTCTACCAACAGGA
 TTGGATATCATATCCCCATGTTTGGCTTTGTTATCATGTTTCTCCACAGTTATGTTTCTTTTC
 TGGACCTATACTCTACTCTTTGTGGCCGAACCTTCAAGGCATTGGATCTTCATTTTCATCTGTTGCA
 GGTCTTGGAAATGCTGGCCAGTGTCTACACTGATGACCATGAGAGAGGACGAGCCATGGGAACTGCTCTGG
 GGGCCTGGCCTTGGGGTTGCTGGTGGGAGCTCCCTTTGGAAGTGAATGTACGAGTTTGTGGGAAGTC
 TGCACCCTTCTCATCTGGCCTTCTGGCACTACTGGATGGAGCACTCCAGCTTGCATCTACAGCCT
 TCCAAAGTCTCTCTGAGAGTGCCAAGGGGACTCCCTCTTTATGCTTCTCAAAGACCCTTACATCTGG
 TGGCTGCAGGTCTAGCTTTCTGGCTGCCAGTGTGCTACCTCATTGGCACCAACCTCTTTGGTGTGT
 GGCCAACAAGATGGGTGGTGGCTGTGTCCCTAATCGGGATGCTGGTAGTAGGTACCAGCTTGTCTGT
 GTTCTCTGGCTCACAATATTTTGGTCTCATTGGCCCAATGCAGGGCTTGGCCTTGCATAGGCATGG
 TGGATTCTCTATGATGCCATCATGGGCACCTGGTGGATCTACGCCACACCTCGGTGATGGGAGTGT
 CTACGCCATCGCTGATGGCTTTTTCATGGCTTTGCTATAGGTCCATCCACCGGTGGTGCATTGTA
 AAGGCCATCGTTTTCCCTGGCTCATGGTCACTGGGGTCATCAACATCGTCTATGCTCCACTCTGCT
 ACTACCTGCGGAGCCCCCGGCAAAGGAAGAGAAGCTTGTATTCTGAGTCAGGACTGCCCCATGGAGAC
 CCGGATGTATGCAACCCAGAAGCCACGAAGGAATTTCTCTGGGGGAGGACAGTGATGAGGAGCCTGAC
 CATGAGGAG

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence:

>RG221148 representing NM_003053
 Red=Cloning site Green=Tags(s)

MLRPILDAPQRLLEGRASRQLVLVVVFVALLLDNMLFTVVVPIVPTFLYDMEFKEVNSSLHLGHAGSSP
 HALASPAFSTIFSFNNNTVAVEESVPSGIAWMNDTASTIPPPATEAISAHKNNCLQGTGFLEEETTRVG
 VLFASKAVMQLLVNPFVGPLTNRIGYHIMPMFAGFVIMFLSTVMFAFSGTYTLLFVARTLQIGSSFSSVA
 GLGMLASVYTDHERGRAMGTALGGLALGLLVGAPFGSVMYEFVGKSAPFLILAFLLDGLALQCLILQP
 SKVSPESAKGTPLFMLLKDPYILVAAGLAFLPASVSYLIGTNLFGVLANKMGRWLCSLIGMLVVGTSLLC
 VPLAHNIFGLIGPNAGLGLAIGMVDSSMMPIMGHLVDLRHTSVYGSVYAIADVAFCMGFAIGPSTGGAI
 KAIGFPWLMVITGVINIVYAPLCYYLRSPPAKEEKLAAILSQDCPMETRMATQKPTKEFPLGEDSDEEPD
 HEE

TRTRPLE – GFP Tag – V

Restriction Sites:

Sgfl-Mlul

Cloning Scheme:


ACCN: NM_003053

ORF Size: 1479 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_003053.1](#), [NP_003044.1](#)

RefSeq Size: 2749 bp

RefSeq ORF: 1578 bp

Locus ID: 6570

UniProt ID: [P54219](#)

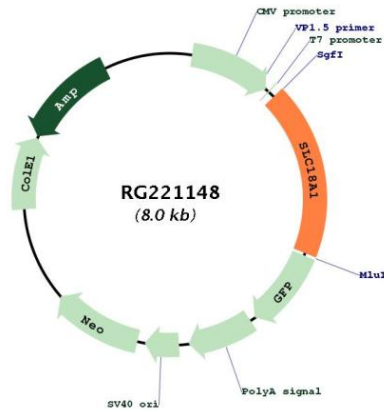
Cytogenetics: 8p21.3

Protein Families: Transmembrane

Protein Pathways: Parkinson's disease

Gene Summary: The vesicular monoamine transporter acts to accumulate cytosolic monoamines into vesicles, using the proton gradient maintained across the vesicular membrane. Its proper function is essential to the correct activity of the monoaminergic systems that have been implicated in several human neuropsychiatric disorders. The transporter is a site of action of important drugs, including reserpine and tetrabenazine (Peter et al., 1993 [PubMed 7905859]). See also SLC18A2 (MIM 193001).[supplied by OMIM, Mar 2008]

Product images:



Circular map for RG221148