

Product datasheet for **SC118200**

VMAT2 (SLC18A2) (NM_003054) Human Untagged Clone

Product data:

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| Product Type: | Expression Plasmids |
| Product Name: | VMAT2 (SLC18A2) (NM_003054) Human Untagged Clone |
| Tag: | Tag Free |
| Symbol: | VMAT2 |
| Synonyms: | PKDYS2; SVAT; SVMT; VAT2; VMAT2 |
| Mammalian Cell Selection: | None |
| Vector: | <u>pCMV6-XL4</u> |
| E. coli Selection: | Ampicillin (100 ug/mL) |



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Fully Sequenced ORF: >OriGene ORF within SC118200 sequence for NM_003054 edited (data generated by NextGen Sequencing)

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ATGGCCCTGAGCGAGCTGGCGCTGGTCCGCTGGCTGCAGGAGAGCCGCCGCTCGCGGAAG
CTCATCTGTTTCATCGTGTTCCTGGCGCTGCTGCTGGACAACATGCTGCTCACTGTCGTG
GTCCCCATCATCCCAAGTTATCTGTACAGCATTAAAGCATGAGAAGAATGCTACAGAAATC
CAGACGGCCAGGCCAGTGCACACTGCCTCCATCTCAGACAGCTTCCAGAGCATCTTCTCC
TATTATGATAACTCGACTATGGTCACCGGAATGCTACCAGAGACCTGACACTTTCATCAG
ACCGCCACACAGCACATGGTGACCAACGCGTCCGCTGTTCTTCCGACTGTCCCAGTGAA
GACAAAGACCTCCTGAATGAAAACGTGCAAGTTGGTCTGTTGTTTGCCTCGAAAGCCACC
GTCCAGCTCATACCAACCCTTTCATAGGACTACTGACCAACAGAATTGGCTATCCAATT
CCCATATTTGCGGGATTCTGCATCATGTTGTCTCAACAATTATGTTTGCCTTCTCCAGC
AGCTATGCCTTCTGCTGATTGCCAGGTCGCTGCAGGGCATCGGCTCGTCTGCTCCTCT
GTGGCTGGGATGGGCATGCTTGCCAGTGTCTACACAGATGATGAAGAGAGAGGCAACGTC
ATGGGAATCGCCTTGGGAGGCTGGCCATGGGGTCTTAGTGGGCCCCCTTGGGAGT
GTGCTCTATGAGTTTGTGGGAAGACGGCTCCGTTCTGGTGTGCTGGCCGCCCTGGTACTC
TTGGATGGAGCTATTCAGCTCTTTGTGCTCCAGCCGTCGCGGTGCAGCCAGAGAGTCAG
AAGGGGACACCCCTAACCACGCTGCTGAAGGACCCGTACATCCTCATTGCTGCAGGCTCC
ATCTGCTTTGCAAAATGGGCATCGCCATGCTGGAGCCAGCCCTGCCATCTGGATGATG
GAGACCATGTGTTCCCGAAAGTGGCAGCTGGGCGTTGCCCTTCTTCCAGCTAGTATCTCT
TATCTCATTGGAACCAATATTTTTGGGATACTTGACACAAAAATGGGGAGGTGGCTTTGT
GCTCTTCTGGGAATGATAATTGTTGGAGTCAGCATTTTATGATTCCATTGCAAAAAAC
ATTTATGGACTCATAGCTCCGAACCTTGGAGTTGGTTTTGCAATTGGAATGGTGGATTCC
TCAATGATGCCTATCATGGGCTACCTCGTAGACCTGCGGCACGTGTCCGCTCATGGGATG
GTGTACGCCATTCCGGATGTGGCATTGTTGATGGGGTATGCTATAGGTCCTTCTGCTGGT
GGTGTATTGCAAGGCAATTGGATTTCCATGGCTCATGACAATTATTGGGATAATTGAT
ATTCTTTTGGCCCTCTGCTTTTTTCTCGAAGTCCACCTGCCAAAGAAGAAAAAATG
GCTATTCTCATGGATCACAACCTGCCCTATTAACAACAAAATGTACACTCAGAATAATATC
CAGTCATATCCGATAGGTGAAGATGAAGAATCTGAAAGTGACTGA
    
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Clone variation with respect to NM_003054.4

5' Read Nucleotide Sequence:

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>OriGene 5' read for NM_003054 unedited
ACCATTTTGTATACGACTCACTATAGGCGGCCGGAATTCGCACGAGCCCACTGCGGTGC
GGGCGTTGGCGCGGGCACGGAGGACCCGGGAGGCATCGCAAGCGACCCCGAGCGGAGCC
CCGGAGCCATGGCCCTGAGCGAGCTGGCGCTGGTCCGCTGGCTGCAGGAGAGCCGCCGCT
CGCGGAAGCTCATCCTGTTTCATCGTGTTCCTGGCGCTGCTGCTGGACAACATGCTGCTCA
CTGTCGTGGTCCCATCATCCCAAGTTATCTGTACAGCATTAAAGCATGAGAAGAATGCTA
CAGAAATCCAGACGGCCAGGCCAGTGCACACTGCCTCCATCTCAGACAGCTTCCAGAGCA
TCTTCTCCTATTATGATAACTCGACTATGGTCACCGGAATGCTACCAGAGACCTGACAC
TTCATCAGACCGCCACACAGCACATGGTGACCAACGCGTCCGCTGTTCTTCCGACTGTC
CCAGTGAAGACAAAGACCTCCTGAATGAAAACGTGCAAGTTGGTCTGTTGTTTGCCTCGA
AAGCCACCGTCCAGCTCATACCAACCCTTTCATAGGACTACTGACCAACAGAATTGGCT
ATCCAATTTCCATATTTGCGGGATTCTGCATCATGTTTGTCTCAACAATTATGTTTGCCT
TCTCCAGCAGCTATGCCTTCTGCTGATTGCCAGGTCGCTGCAGGGCATCGGCTCGTCT
GCTCCTCTGTGGCTGGGATGGGCATGCTTGCCAGTGTCTACACAGATGATGAAGAGAGAG
GGCACGTATGGGATCGNNCTTGGGAGCTGCCATGGNGGTTCTANTGGCCCCCCTT
CGNAGTGTGCTCTATGAGTTTTGTGGGAAAGACGGGCTTCGTCTGGTGTGGGCGNC
CTGGTACCCTGGNATGGAGCATTTACCTCTTTGTGCTCCACCCGGTCCCGGGTGCAGCC
AGAAAGTCANAAGGGCCACCCTTACCACCCTGCTGAAGGAN
    
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| 3' Read Nucleotide Sequence: | >OriGene 3' read for NM_003054 unedited GCTATTTTCAAGTATACTTGCTAAAATATGGACAGCTACACTTAGCAGTCAAACAGTTGA ATATTCATTGCTACCTCATTAAAGTTTTTGTATCTGTATTACCAGGTCCAAACATAAAAA CCACCTCTGTTCAAAAAATAAATGTTTCAGAGAGCTGTATGTTCTTTGTTCTGGTATGTAC ATTTTAAAAAACACCTCTTCCAGTCTTGCTAACCAAGAATATTAGTCATATAAAAGAA CTTAGAATTTTTTCCCCAAGTACAAGCTATCTTTTGTCCAAAACAGTTCTGAAGGCC TATTTATATTTCCATCTTATCCCGAGGGACCAACAGCAGGCTACCTTTTTTCAGTTTCT CGCACCATTACCCATAGCCCCTTATGCCAATATCACCTTGCCCCAATATCTCACTCCTTG CCGTCATGGTTCACTCTATCCTTTCCCATTCACCTACCTTCCCCCATAACTTTTTTACT GCTTCCCTTCCCTCCCTTACCCCGCTTTCCTTCCACCCCTCCTCTTCTTCCCTCC CCCCTTCTCATTTTTTCTTCCCTTTTCTTCTCTCCGTTTTCTTCTTTTCTTTCC CTCTTCCCTTCTTACTCCTTTGACTTTTCCACCTCCCTTACTATTGTTTTCTCTCCC TTTATTTCCCATCTTCCCTTCCCTCTCCCTCCCTTATCCCACCACTTAATTCATTATC TTTTTATATTTTTTCTCTATACTCCTTCCCCTTCTCTTACTACTTTTCTCCTCTTC CTTTTCTCTTTTACCCTTCATATCTCCGCGCTACCCCTTTCTTTCTTATCGCTCNC TACTTCCATATCACTCTCCTCCTCCTCCTCTTCTCGTCTCTCTTCTTCTGCTTCGT CTTCGCTCCCCCTCCCCCGCTCCACTTCTCTCCATCTCGCCTTTTGTCTGCTCACTA CATTTCTAACCTCATTCTCCGTCTTTCGATCTATCCATTNTTATATCTCGCGCTCAC TCACTACTTCTTCTCATTATCTTTACCTTACTAGTTCTTATCC |
| Restriction Sites: | NotI-NotI |
| ACCN: | NM_003054 |
| Insert Size: | 3890 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: | <ol style="list-style-type: none"> 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: | <u>NM_003054.2</u> , <u>NP_003045.2</u> |
| RefSeq Size: | 1898 bp |
| RefSeq ORF: | 1545 bp |
| Locus ID: | 6571 |
| UniProt ID: | <u>Q05940</u> |
| Cytogenetics: | 10q25.3 |

Protein Families: Transmembrane

Protein Pathways: Parkinson's disease

Gene Summary: This gene encodes an transmembrane protein that functions as an ATP-dependent transporter of monoamines, such as dopamine, norepinephrine, serotonin, and histamine. This protein transports amine neurotransmitters into synaptic vesicles. Polymorphisms in this gene may be associated with schizophrenia, bipolar disorder, and other neurological/psychiatric ailments. [provided by RefSeq, Jun 2018]