

## Product datasheet for **SC113161**

### VGLuT1 (SLC17A7) (NM\_020309) Human Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	VGLuT1 (SLC17A7) (NM_020309) Human Untagged Clone
Tag:	Tag Free
Symbol:	VGLuT1
Synonyms:	BNPI; VGLUT1
Mammalian Cell Selection:	None
Vector:	<u><a href="#">pCMV6-XL5</a></u>
E. coli Selection:	Ampicillin (100 ug/mL)



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**Fully Sequenced ORF:** >OriGene ORF within SC113161 sequence for NM\_020309 edited (data generated by NextGen Sequencing)

```

ATGGAGTTCGCCAGGAGGAGTTTCGGAAGCTAGCGGGTCGTGCTCTCGGGAAGCTGCAC
CGCCTTCTGGAGAAGCGGCAGGAAGGCGCGGAGACGCTGGAGCTGAGTGCGGATGGGCGC
CCGGTGACCACGCAGACCCGGGACCCCGGTGGTGGACTGCACCTGCTTCGGCTCCCT
CGCCGCTACATTATCGCCATCATGAGTGGTCTGGGCTTCTGCATCAGCTTTGGCATCCGC
TGCAACCTGGGCGTGGCCATCGTCTCCATGGTCAATAACAGCACGACCCACCGGGGGC
CACGTGGTGGTGAGAAAGCCAGTTCAGCTGGGATCCAGAGACTGTCGGCTCATAACAC
GGCTCCTTTTTCTGGGGTACATTGTCACTCAGATTCCAGGAGGATTTATCTGTCAAAAA
TTTGCAGCCAACAGAGTTTTCGGCTTTGCTATTGTGGCAACATCCACTCTAAACATGCTG
ATCCCCTCAGCTGCCCGCTCCACTATGGCTGTGTATCTTCGTGAGGATCCTGCAGGGG
TTGGTAGAGGGGGTACATAACCCGCTGCCATGGGATCTGGAGCAAATGGGCCCCACCC
TTAGAACGGAGTCGCTGGGACGACAGCCTTTTGTGGTTCCTATGCTGGGGCGGTGGTC
GGGATGCCCTCGCCGGGTCTTGTGCAGTACTCAGGATGGAGCTCTGTTTTCTACGTC
TACGGCAGCTTCGGGATCTTCTGGTACCTGTTCTGGCTGCTCGTCTCCTACGAGTCCCC
GGCTGCACCCAGCATCTCGGAGGAGGAGCGCAAGTACATCGAGGACGCCATCGGAGAG
AGCGCGAAACTCATGAACCCCTCACGAAGTTTAGCACTCCCTGGCGGGCTTCTTACAG
TCTATGCCAGTCTATGCCATCATCGTGGCAACTTCTGCCGACGCTGGAGTTCACCTG
CTGCTCATCTCCAGCCCGCTACTTCAAGAAGTGTTCGGCTTCGAGATCAGCAAGGTA
GGCCTGGTGTCCGCGTGCACCCACTGGTATGACCATCATCGTCCCATCGGCGGCCAG
ATCGCGGACTTCTCGGAGCCCGCATCATGTCCACCACCAACGTGCGCAAGTTGATG
AACTGCGGAGGCTTCGGCATGGAAGCCACGCTGCTGTTGGTGGTGGCTACTCGCACTCC
AAGGGCGTGGCCATCTCCTTCTGGTCTAGCCGTGGGTTTCAGCGGCTTCGCCATCTCT
GGGTTCAACGTGAACCACCTGGACATAGCCCGCGCTACGCCAGCATCCTCATGGGCATC
TCCAACGGCGTGGGCACACTGTGGGCATGGTGTGCCCATCATCGTGGGGCCATGACT
AAGCACAAGACTCGGAGGAGTGGCAGTACGTGTTCTAATTGCCTCCCTGGTGCATAT
GGAGGTGTCTTCTACGGGTCTTTGCTTCTGGAGAGAAGCAGCCGTGGGCAGAGCCT
GAGGAGATGAGCGAGGAGAAGTGTGGCTTCGTTGGCCATGACCAGCTGGCTGGCAGTGAC
GACAGCGAAATGGAGGATGAGGCTGAGCCCCGGGGGACCCCTGCACCCCGCCCTCC
TATGGGGCCACACACAGCACATTTAGCCCCCAGGCCCCACCCCTGTCCGGGACTAC
TGA
    
```

Clone variation with respect to NM\_020309.3

**5' Read Nucleotide Sequence:** >OriGene 5' read for NM\_020309 unedited

```

TTTCGGATTTTGTAAACGACTCACTATAGGGCGGCACGCGATTTCGGCACGAGGCCCGAG
CGGAGCTGCGGGCCCGCCGGGGCGGGGACCCCGGGAACCCGAGCCGCGCCCGCCGG
GCCCGCGGGCGGGGGATCGGCGGGGGGACCCCGGGGTGACCGCGGCAGGAGCCGCC
ACCATGGAGTTCCGCCAGGAGGAGTTTCGGAAGCTAGCGGGTCTGCTCTCGGGAAGCTG
CACCGCTTCTGGAGAAGCGGCAGGAAGGCGCGGAGACGCTGGAGCTGAGTGCGGATGGG
CGCCCGGTGACCACGCAGACCCGGGACCCCGGTGGTGGACTGCACCTGCTTCGGCCTC
CCTCGCCGCTACATTATCGCCATCATGAGTGGTCTGGGCTTCTGCATCAGCTTTGGCATC
CGTGCAACCTGGGCGTGGCCATCGTCTCCATGGTCAATAACAGCACGACCCACCGGGG
GGCCACGTGGTGGTGCAGAAAGCCAGTTCAGCTGGGATCCAGAGACTGTCGGCTCATA
CACGGCTCCTTTTTCTGGGGTACATTGTCACTCAGATTCCAGGAGGATTTATCTGTCAA
AAATTTGCAGCCAACAGAGTTTTTCGGCTTTGCTATTGTGGCAACATCCACTCTAAACATG
CTGATCCNCTCAGCTGCCCGCTCCACTATGGCTGTGTATCTTCGTGAGGATCCTGCAG
GAGTTGGTAGATGGGGTACATAACCCGCTGCCATGGGATCTGGAGCATATGGGCCCA
CCCTTAGAACGGAGTCGCTGGGACGACAGCCTTTTGTGGTTCCTATGCTGGGGCAGTG
GTCGGATGCCCTCGCGGTCTTGTGCAGTACTCAGGATGGAGCTCTGTTTTCTACG
TCTACAGCAGCTTCAGGATCTTCTGGTACCTGGTCTGGCTGCTCGGCTCTACAAGTCCC
C
    
```

<b>3' Read Nucleotide Sequence:</b>	<p>&gt;OriGene 3' read for NM_020309 unedited  CGCCGCAATCTAGAGTCGAGTTTTTTTTTTTTTTTTTTTAAACCAAAGCTTTTATTGGGAGT  GGGGCAGGGCAGGATTTACAGTCACAGAGACAGAGACACAAGACACAACCCTGCACTGG  GAAAAACACCCCTGTCTCCTGCCCATTCCTTTTCATGGGATTCTGTGACTTCTCTATA  GGTTCCCAAATTCTAAGCTGAAAGAGGGGTGTCTGAGAGGGGAAGGATCCCAGATTTTG  AGTCATTAAGCCCTGAGGGACACAACAATGGCCACTGAGAAACAGGGTAGTTCGAAAC  CACCCAGGAGAAATAAAGTGCAGGAATTGGGGAGGGGGCATCATGAAACCACCATGGGGG  AGTTCAATGGTGGTAGCTTCAAACCTTTGAGTTCATGGACTGGAGCAGCCACTATTAGA  CCTGAAAACCATGTCAGAAAAAGTGCACGGGGGTAGAGAGGCATATTGTTAAAATTGCGA  TTTTGGTTGTTTCCCAGACATTATGCTAAGCTAGGGAGAAGAGGGTCTTGAGAAATTTG  GTGCTTTCGAAAATCTGCTGGTAGGGGAGATGTGAAGTGGGCACGGAATCGGGGACTTG  AAACCGCCATTTCCATCAGAAACGCTGGTGAGAATCAATCCCTGGAATGGCGGNGACGA  GTAATTGGTTAAACCAATCTGGAAGATGCAGAAACAGAGTGGGAGAGATTTGAAACTTCT  AGAGGAGGACCTTTGATTTTTCTGAAAGGAGATGGGAGCTGAGTGATCTCAAAGGNTAGC  CTGANAGTCCCTGGAGATAAAGAAGCGGGGGGTGTGGGTGCCCTCAAACCACAGAGAGAG  TAGAGTGAACCTGTCATTCAATAAAGCCTGAAGGAAGATTGACCACTGAGCAGACGGTGG  AGAGGAACCTTAGGGGATGGGTATCCTGAAACGTAGTCTGACTTCTACCTGAAGGCAT  GGG</p>
<b>Restriction Sites:</b>	NotI-NotI
<b>ACCN:</b>	NM_020309
<b>Insert Size:</b>	2820 bp
<b>OTI Disclaimer:</b>	<p>Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at <a href="mailto:custsupport@origene.com">custsupport@origene.com</a> or by calling 301.340.3188 option 3 for pricing and delivery.</p> <p>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. <a href="#">More info</a></p>
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"> <li>1. Centrifuge at 5,000xg for 5min.</li> <li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li> <li>3. Close the tube and incubate for 10 minutes at room temperature.</li> <li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li> <li>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.</li> </ol>
<b>RefSeq:</b>	<a href="#">NM_020309.2</a> , <a href="#">NP_064705.1</a>

RefSeq Size: 2959 bp

RefSeq ORF: 1683 bp

Locus ID: 57030

UniProt ID: [Q9P2U7](#)

Cytogenetics: 19q13.33

Domains: sugar\_tr

Protein Families: Transmembrane

**Gene Summary:** The protein encoded by this gene is a vesicle-bound, sodium-dependent phosphate transporter that is specifically expressed in the neuron-rich regions of the brain. It is preferentially associated with the membranes of synaptic vesicles and functions in glutamate transport. The protein shares 82% identity with the differentiation-associated Na-dependent inorganic phosphate cotransporter and they appear to form a distinct class within the Na<sup>+</sup>/Pi cotransporter family. [provided by RefSeq, Jul 2008]