

Product datasheet for **SC108121**

SLC19A3 (NM_025243) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	SLC19A3 (NM_025243) Human Untagged Clone
Tag:	Tag Free
Symbol:	SLC19A3
Synonyms:	BBGD; THMD2; thTr-2; THTR2
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 SC108121 sequence for NM_025243 edited (data generated by NextGen Sequencing)

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ATGGATTGTTACAGAACTTCACTAAGCAGTTCCTGGATTTACCCCACTGTGATCCTCTGC
TTATTTGGTTTTTCTCCATGATGAGACCCTCAGAACCATTCTTATCCCATATTTATCT
GGACCAGATAAAAACCTGACCAGTGCAGAGATAACAAATGAGATCTTCCCGTTTGGACA
TACTCTACCTGGTGTCTGCTGCCTGTGTTTGTCTCACCGATTATGTCGGCTACAAG
CCAGTCATCATCTTGCAAGGTATCAGTTTATCATTACCTGGCTGCTGCTGTTGTTGGC
CAAGGAGTGAAGACCATGCAGGTTGTAGAGTTCTTCTATGGGATGGTCACCGCCGCGAG
GTGGCCTACTACGCCTACATATACAGCGTGGTCAGCCCCGAGCACTACCAGAGAGTGAGC
GGCTACTGCAGGAGCGTCACGCTGGCCGCTACACAGCAGGGTCGGTGTGGCTCAACTC
TTGGTATCCCTGGCGAACATGTCGTACTTTTACCTCAACGTCATATCCTTGGCCTCTGTC
TCCGTGGCTTTCTTTTCTCACTTTTCTACCAATGCCAAGAAAAGCATGTTTTTTCAT
GCAAAACCCAGCAGAGAAATAAAGAAGTCATCAAGCGTGAATCCAGTATTAGAGGAACT
CACGAAGTGAAGCACCAGGCTGTGAAGAGCAGAAACCCACATCAGAAATACTCAGCACT
TCAGGGAAGCTGAATAAGGGCCAGCTGAACAGCCTGAAACCAAGCAATGTGACTGTGGAC
GTTTTTGTGCAGTGGTCCAAGATTTGAAGGAGTGTACTCTCAAACGCTTTTTCTAC
TGGTCTCTATGGTGGGCTTTTCGCCACAGCAGGTTTTAACCAGGTTTTGAACTATGTTCAA
ATCCTGTGGGATTACAAGGCGCCATCCCAAGATTTCTCCATCTATAATGGGGCCGTAGAA
GCTATTGCAACCTTTGGAGGGGCTGTGGCTGCCTTTGCACTGGGTTATGTGAAAGTCAAC
TGGGACCTTCTGGGAGAGCTGGCTCTGGTGGTCTTCTCAGTTGTCAATGCCGGTTCTTTA
TTTCTCATGCATTACACAGCCAATATCTGGGCGTGTATGCTGGCTATTTGATATTCAAG
TCCAGCTATATGCTTCTTATAACCATAGCAGTATTTAGATTGCAATTAATCTGAATGTG
GAACGTATGCCTTGGTATTTGGAATCAACACCTTTATTGCTTGGTATTGAGACCATC
ATGACTGTGATTGTAGTAGATCAGAGAGGCTCAACTTGCCAGTCAAGTTCAGTTTTTA
GTTTATGGGAGCTATTTTGCAGTAATTGCTGGAATTTTCTAATGAGAAGCATGTATATT
ACCTACTCAACCAATCCAGAAGGATGTACAGAGCCCTGCTCCAAGTGAAGTCCAGAT
GTGTCTCACCCAGAGGAAGAGTAATATCATCATGTCAACAAAACCTCTAA
    
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Clone variation with respect to NM_025243.3

5' Read Nucleotide Sequence: >OriGene 5' read for NM_025243 unedited

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NGGTTTCAGATTTTGTAAACAGTCTCACTATAGGGCGGCCGGAATTCGCACCAGGGCA
AGTGAGCGATTTGGTGAACAGACTCCCTTCTGTAGCCATGGATTGTTACAGAACTTCA
CTAAGCAGTTCCTGGATTTACCCCACTGTGATCCTCTGCTTATTTGGTTTTTCTCCATG
ATGAGACCCTCAGAACCATTCTTATCCCATATTTATCTGGACCAGATAAAAACCTGACC
AGTGCAGAGATAACAAATGAGATCTTCCCGTTTGGACATACTCTACCTGGTGTGCTG
TGCCTGTGTTTGTCTCACCGATTATGTCCGCTACAAGCCAGTCATCATCTTGCAAGGT
ATCAGTTTTCATATTACCTGGCTGCTGCTGTTGTTTGGCCAAGGAGTGAAGACCATGCAG
GTTGTAGAGTTCTTCTATGGGATGGTCACCGCCGCGAGGTGGCCTACTACGCCTACATA
TACAGCGTGGTCAGCCCCGAGCACTACCAGAGAGTGAGCGGCTACTGCAGGAGCGTCACG
CTGGCCGCTACACAGCAGGGTCGGTGTGGCTCAACTCTTGGTATCCCTGGCGAACATG
TCGTACTTTTACCTCAACGTCATATCCTTGGCCTCTGTCTCCGTGGCTTTCTTTTCTCA
CTTTTCTACCAATGCCAAGAAAAGCATGTTTTTTCATGCANAACCCAGCAGAGAAATA
AAGAAGTCATCAAGCGTGAATCCAGTATTAGAGGAACTCACGAAGGTGAAGCACCAGGC
TGTGAAGAGCAGAAACCCACATCAGAATACTCAGCACTTCAAGGAAAGCTNGATAAGGGCC
AGCTGAACAGCCTGAAACCAAGCATGTGACTGTGGACGTTTTTGTGCAGTGGTCCAAGATT
TGAAGAGTGTACTCTCAA
    
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3' Read Nucleotide Sequence:	>OriGene 3' read for NM_025243 unedited ATCGAGTTTTAAATTCCTTTTTTTTGTAAAAAAGGGTTTAATTAGCTCACAGGCTATAT AGGAAGCGTGGCAACATCTGCTTCTAGGGAGTCCTCAGGGAATTTTACTCATGGCAGAA GGCAAAGTGGGAGCAGGCATCTTCACGTGGCCAAAGCAGGAGAAAGAGAGAGTGGGGAGG TGCTACACACTTTTAACTACCAGATCTCACGATAACTCACTGTCATGAGACCAGCACTG AGGGGACGGTGCCAAACCATTTCATGAAGGCTTCACACCCATGATCCAGTCGCCTCCCAGC CGGCCCCACCTCTAACATTGGGGATTACACTTCAACGTGAGATTTGGTGGGGACACAGAT CCAAACCATATCAAATCCAATTAATAATTTTTTTGTTTGTAGACACAGGGTCTTGC TATATTGGCCAAGATGGTCTCATACCCCTACCCTCAAATTAACCTCTCACTTCAGCCTCC CAAAATGCTGGGATTACAGGTGTGAGCCAAAGCTTCCAGCCTGATATAAATCTTGACTC AGCATTCTTATTCTCACTGTCAGACTGCTCAATGCATCCCTATTGAAGTTTCTTTGAA GTTTTCGAAAACAGGTATGTTTCAGATAATTTTCAGCAGAATTCATCANANAATGTAAAC ACTGCTTAAAATTTTACACATTTTATTTAGCACAATTGCTACCATTTAAAATCANNGTG TTTTGCCAGCATGGGGGGGGCTCAGCCCTGTTATCTCAGCTCTTTGGGAGGGCCGAGG CAGACAGATCACCTGAAGTCAGGAGTTNTGAGACCAGNNCTGGCCAACATTGTGAAACC CCATCTACTAAATACAATCGGGGGG
Restriction Sites:	ECoRI-NOT
ACCN:	NM_025243
Insert Size:	4000 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:	NM_025243.2 , NP_079519.1
RefSeq Size:	3532 bp
RefSeq ORF:	1491 bp
Locus ID:	80704
UniProt ID:	Q9BZV2
Cytogenetics:	2q36.3
Domains:	Folate_carrier
Protein Families:	Transmembrane

Gene Summary:

This gene encodes a ubiquitously expressed transmembrane thiamine transporter that lacks folate transport activity. Mutations in this gene cause biotin-responsive basal ganglia disease (BBGD); a recessive disorder manifested in childhood that progresses to chronic encephalopathy, dystonia, quadriparesis, and death if untreated. Patients with BBGD have bilateral necrosis in the head of the caudate nucleus and in the putamen. Administration of high doses of biotin in the early progression of the disorder eliminates pathological symptoms while delayed treatment results in residual paraparesis, mild cognitive disability, or dystonia. Administration of thiamine is ineffective in the treatment of this disorder. Experiments have failed to show that this protein can transport biotin. Mutations in this gene also cause a Wernicke's-like encephalopathy.[provided by RefSeq, Jan 2010]