

Product datasheet for **RG204719**

Genethonin 1 (STBD1) (NM_003943) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Tag:	TurboGFP
Symbol:	Genethonin 1
Synonyms:	GENEX3414; GENX-3414
Mammalian Cell	Neomycin
Selection:	
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

ORF Nucleotide Sequence: >RG204719 representing NM_003943
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGGCGCCGCTCTGGTCCGCCCTGCTGGTTGGAGGGGGTCTGGCCGGAGCACTTTTCGTTTGCTGCTGC
GGGGCGGCCCTGGCGACACCGGGAAGGACGGGGATGCGGAGCAGGAGAAAGACGCCCTCTTGGGGGAGC
TGCGATTCCGGGAGGCCATCAGAGTGGCAGCAGCGGACTGAGCCCTGGACCTTCCGGGCAGGAGCTGGTC
ACCAAACAGAGCATCTTCAAGAAAGCAATGGACATTTGATTTCTAAGACCAAGACCTTGGTAACTGC
AAGCAGCATCATGGAGATTGCAGAATCCTTCCAGGGAAGTCTGTGACAATTCAGAGAACATGTTCTTC
TGGACAGTTTCCAGACACAGAAGCTCCAGCTACCTCTGAGACCAGTAACTCTAGGAGTTACTCTGAAGTT
TCAAGAAATGAAAGCCTTGAATCTCCTATGGGAGAATGGGGATTCCAAAAGGACAAGAGATATCTGCTA
AAGCAGCTACATGTTTGCAGAGAAGTTGCCTTCTAGCAACCTGCTCAAGAACAGAGCTAAAGAAGAAAT
GAGCCTCTCTGATTGAACAGTCAGGACCGGTTGACCACGAGGAGTGGGAAATGGTGCCTAGGCACTCA
TCTTGGGGGGATGTTGGTGTGGGTGGCAGTCTTAAGGCTCCAGTGTAAACCTAAACCAGGGAATGGACA
ATGGAAGAAGCACTTTGGTGAAGCAAGAGGTGAGCAAGTGCATGGGAAATGGAAAGGGTAGCAGTGAT
GCCTGCAGGGTCTCAGCAAGTTAGTGTGAGGTTCCAGGTCCATTATGTCACAAGCACTGATGTGCAATTC
ATTGCACTAACTGGAGACCATGAGTGTCTTGGGAGATGGAACATTACATCCCACTCCACTATAACAAGG
ATGGGTTCTGGTCTCATTCCATTTTCTGCCTGCAGATACAGTGGTGGAGTGGAAAGTTTGTGTTGGTAGA
GAATGGGGGAGTTACCGCTGGGAAGAATGCAGCAATAGATTCTAGAACTGGCCATGAGGATAAAGTG
GTTACGCATGGTGGGGATTAC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



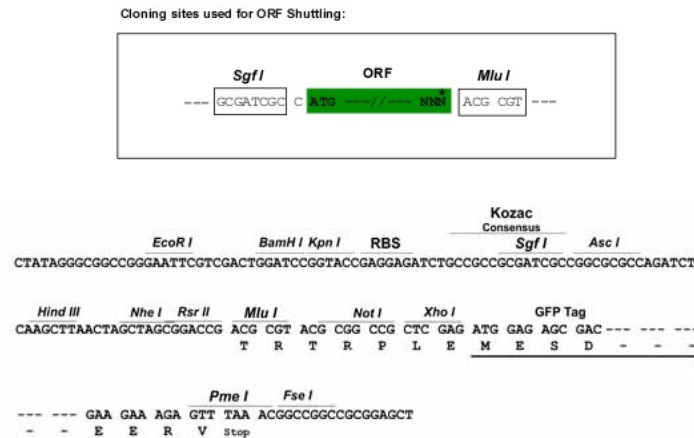
Protein Sequence: >RG204719 representing NM_003943
 Red=Cloning site Green=Tags(s)

MGAVWSALLVGGGLAGALFVWLLRGPGDTGKDGAEEQEKDAPLGGAIPGGHQSGSSGLSPGPSGQELV
 TKPEHLQESNGHLISKTKDLGKLQAASWRLQNPSREVCDNSREHVPSPGQFPDTEAPATSETSNRSYSEV
 SRNESLESPMGWGFQKQGEISAKAATCFAEKLPSNLLKNRAKEEMSLSDLNSQDRVDHEEWEMVPRHS
 SWGDVGVGGSLLKAPVLNLNQGMNDNGRSTLVEARGQQVHGKMERVAVMAGSQQVSVRFQVHYVTSTDVQF
 IAVTGDHECLGRWNTYIPLHYNKDGFWSHSIFLPADTVVEWKFVLVENGVTREECNRFLETGHEDKV
 VHAWWGIH

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_003943

ORF Size: 1074 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.
Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	<u>NM_003943.4</u>
RefSeq Size:	2340 bp
RefSeq ORF:	1077 bp
Locus ID:	8987
UniProt ID:	<u>O95210</u>
Cytogenetics:	4q21.1
Domains:	CBM_20
Protein Families:	Transmembrane
Gene Summary:	Acts as a cargo receptor for glycogen. Delivers its cargo to an autophagic pathway called glycophyagy, resulting in the transport of glycogen to lysosomes.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for RG204719