

Product datasheet for **RG217558**

SI (NM_001041) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	SI (NM_001041) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	SI
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG217558 representing NM_001041 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCAAGAAAGAAATTTAGTGGATTGAAATCTCTCTGATTGTCCTTTTTGTCATAGTTACTATAATAG
CTATTGCCTTAATTGTTGTTTTAGCAACTAAGACACCTGCTGTTGATGAAATTAGTGATTCTACTTCAAC
TCCAGCTACTACTCGTGTGACTACAAATCCTTCTGATTGAGGAAAATGTCCAAATGTGTTAAATGATCCT
GTCAATGTGAGAATAAACTGCATTCCAGAACAATCCCAACAGAGGGAATTTGTGCACAGAGAGGCTGCT
GCTGGAGGCCGTGGAATGACTCTTTATTCCTTGGTCTTCTTCGTTGATAATCATGGTTATAACGTTCA
AGACATGACAACAACAAGTATTGGAGTTGAAGCCAAATTAACAGGATACCTTCACTACACTATTTGGA
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ACTCATGTATTCCAAAACAATTTGCATGGATGCTGTGCAGAAGCTGGGGTAAACAGTATGATGTTTCATAGC
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ACCTTAACAAGCACTATATTGAAGAGAGGTTACATAAAATAAAAGTGAAACGAGGCTTGGATCCCTTCATG
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 TTTAATGAAGACACTACCAACATGATATTACGTATTGATCTGACCACACACAATGTTACTCTAGAAGAA
 CCAATAGAAATCAACTGGTCA

ACGCGTACGCGGCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence:

>RG217558 representing NM_001041
 Red=Cloning site Green=Tags(s)

MARKKFSGLEISLIVLFVIVTIIAIALIVVLATKTPAVDEISDSTSTPATTRVTTNPSDSGKCPNVLNDP
 VNVIRINCIPEQFPTEGICARGCCWRPNWDSLIPWCFVDNHGYNVQDMTTTIGVEAKLNRIPSPTLFG
 NDINSVLFTTQNTPNRFRFKITDPNRRRYEVPHQYVKEFTGPTVSDTLVDVKAQNPFSIQVIRKSNKG
 TLFDTSIGPLVYSDQYLQISARLPDYIYGIGEQVHKFRHDLWKTPWIFTRDQLPGDNNNNLYGHQTF
 FMCIEDTSGKSFVFLMNSNAMEIFIQPTPIVTVYRVTTGGILDFYILLGDTPEQVVQYQQLVGLPAMPAY
 WNLGFQLSRWNYKSLDVVKEVVRNRREAGIPFDTQVTDIDYMEDKKDFTYDQVAFNGLPQFVQDLHDHGQ
 KYVVIIDPAISIGRRANGTTYATYERGNQHVWINE SDGSTPIIGEVWGLTVYPDFTNPNCIDWWANEC
 SIFHQEVQYDGLWIDMNEVSSFIQGSTKGCNVNKLNYPPFTPDILDKLMYSKICMDAVQNWGKYDVHS
 LYGYSMAIATEQAVQKVPNKRSFILTRSTFAGSGRHAHHLGDNTASWEQMEWSITGMLEFSLFGIPLV
 GADICGFVAETTEELCRRWMLGAFYPPSRNHNSDGYEHQDPAFFGQNSLLVKSSRQYLTRYTLPLFLY
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 IQNGNYIYTFVSNNLTDIVCTHSSYQEGTTLAFQTVKILGLTDSVTEVRVAENNQPMNAHSNFTYDAS
 NQVLLIADLKLNLGRNFSVQWNQIFSENERFNCYPDADLATEQKCTQRGCVWRTGSSLKAPECYFPRQD
 NSYSVNSARYSSMGITADLQLNTANARIKLPSPDPISTLRVEVKYHKNDMLQFKIYDPQKKRYEVPVPLNI
 PTTPISTYEDRLYDVEIKENPFQIIRRRSSGRVWISWLPGFANQDFIQIISTRLPSEYIYGFGEVEHT
 AFKRDLNWNWGMFTRDQPPGYKLSYGFHPYMALEEEGNAHGVFLNNSNAMDVTFQPTPALTYRTVGG
 ILDFYMFLLGPTPEVATKQYHEVIGHVPMPAYWALGFQLCRYGYANTSEVRELYDAMVAANIPYDVQYTDI
 DYMERQLDFTIGEAQDLQFVQDKIRGEGMRYIILDPAISGNETKTYPAFERGQQNDVFKWPNTNDIC
 WAKVWPDLPNITIDKTLTEDEAVNASRAHVAFPDFRTSTAEWWAREIVDFYNEKMKFDGLWIDMNEPSS
 FVNGTTTQCRNDELNYPYFPELTKRTDGLHFRTICMEAEQILSDGTSVLHYDVHNLVYGSQMKPTHDA
 LQKTTGKRGIVISRSTYPTSGRWGGHVLGDNYARWDMDKSIIIGMEFSLFGISYTGADICGFFNNEYH
 LCTRWMQLGAFYPYSRNHNIANRRQDPASWNETFAEMSRNINIRYTLPLPYFYTMHEIHANGGTVIRP
 LLHEFFDEKPTWDFKQFLWGPAPMVTPLVLEPYVQTVNAYVFNARWFDYHTGKDIGVRGQFQTFNASYDT
 INLHVRGGHILPCQEPANQTFYSRQKHMKLIVAADDNQMAQGSWFDDGESIDTYERDLYLSVQFNLNQT
 TLTSTILKRGYINKSETRLGSLHVWGKGTTPVNAVTLTYNGNKNSLPFNEDTTNMILRIDLTTHNVTLLEE
 PIEINWS

TRTRPLE – GFP Tag – V

Restriction Sites:

Sgfl-MluI

Cloning Scheme:


ACCN: NM_001041

ORF Size: 5481 bp

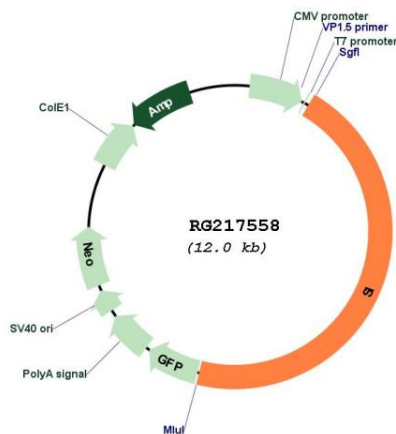
OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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:	<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_001041.1, NP_001032.1</u>
RefSeq Size:	6021 bp
RefSeq ORF:	5484 bp
Locus ID:	6476
UniProt ID:	<u>P14410</u>
Cytogenetics:	3q26.1
Protein Families:	Druggable Genome, Transmembrane
Protein Pathways:	Metabolic pathways, Starch and sucrose metabolism
Gene Summary:	<p>This gene encodes a sucrase-isomaltase enzyme that is expressed in the intestinal brush border. The encoded protein is synthesized as a precursor protein that is cleaved by pancreatic proteases into two enzymatic subunits sucrase and isomaltase. These two subunits heterodimerize to form the sucrose-isomaltase complex. This complex is essential for the digestion of dietary carbohydrates including starch, sucrose and isomaltose. Mutations in this gene are the cause of congenital sucrase-isomaltase deficiency.[provided by RefSeq, Apr 2010]</p>

Product images:



Circular map for RG217558