

Product datasheet for RC217558

SI (NM_001041) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	SI (NM_001041) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	SI
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC217558 representing NM_001041 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCCGATCGCC

ATGGCAAGAAAGAAATTTAGTGGATTGAAATCTCTGATTGTCCTTTTTGTCATAGTTACTATAATAG
CTATTGCCTTAATTGTTGTTTTAGCAACTAAGACACCTGCTGTTGATGAAATTAGTGATTCTACTTCAAC
TCCAGCTACTACTCGTGTGACTACAAATCCTTCTGATTGAGGAAAATGTCCAAATGTGTTAAATGATCCT
GTCAATGTGAGAATAAACTGCATTCCAGAACAATCCCAACAGAGGGAATTTGTGCACAGAGAGGCTGT
GCTGGAGGCCGTGGAATGACTCTTTATTCCTTGGTCTTCTTCGTTGATAATCATGGTTATAACGTTCA
AGACATGACAACAACAAGTATTGGAGTTGAAGCCAAATTAACAGGATACCTTCACTACACTATTTGGA
AATGACATCAACAGTGTCTCTTCACTCAAAATCAGACACCAATCGTTTCCGGTTCAGATTACTG
ATCCAAATAATAGAAGATATGAAGTTCCTCATCAGTATGTAAAAGAGTTTACTGGACCCACAGTTTCTGA
TACGTTGTATGATGTGAAGGTTGCCAAAACCCATTTAGCATCCAAGTTATTAGGAAAAGCAACGGTAAA
ACTTTGTTTGACACCAGCATTGGTCCCTTAGTGTACTCTGACCAGTACTACAGATCTCAACCCGCTTTC
CAAGTGATTATTTATGGTATTGGAGAACAAGTTCATAAGAGATTTTCGTCATGATTTTACTCTGGAAAAC
ATGGCCAATTTTACTCGAGACCAACTTCTGGTGATAATAATAAATTTATACGGCCATCAAACATTC
TTTATGTGATTGAAGATACATCTGAAAGTCATTCCGGTGTTTTTTAATGAATAGCAATGCAATGGAGA
TTTTTATCCAGCCTACTCCAATAGTAACATATAGAGTTACCGGTGGCATTCTGGATTTTTACATCCTTCT
AGGAGATACACCAGAACAAGTAGTTCAACAGTATCAACAGCTTGTGGACTACCAGCAATGCCAGCATAT
TGGAACTTTGGATTCCAACCTAAGTCGCTGGAATTATAAGTCACTAGATGTAGTGAAGAAGTGGTAAAGGA
GAAACCGGGAAGCTGGCATAACATTTGATACACAGGTCAGTATGACTACATGGAAGACAAGAAAGA
CTTTACTTATGATCAAGTTGCGTTTAAACGGACTCCCTCAATTTGTGCAAGATTGTCATGACCATGGACAG
AAATATGTCATCATCTTGGACCTGCAATTTCCATAGGTCGACGTGCCAATGGAACAACATATGCAACCT
ATGAGAGGGGAAACACACAACATGTGTGGATAAATGAGTCAGATGGAAGTACACCAATTTGGAGAGGT
ATGGCCAGGATTAACAGTATACCCTGATTTCACTAACCCAACTGCATTGATTGGTGGGCAATGAATGC
AGTATTTCCATCAAGAAGTGCAATATGATGGACTTTGGATTGACATGAATGAAGTTCCAGCTTTATTC
AAGTTCAACAAAAGGATGTAATGTAAACAAATTGAATTATCCACCGTTTACTCCTGATATTCTTGACAA



[View online >](#)

ACTCATGTATTCCAAAACAATTTGCATGGATGCTGTGCAGAACTGGGGTAAACAGTATGATGTTTCATAGC
 CTCTATGGATACAGCATGGCTATAGCCACAGAGCAAGCTGTACAAAAAGTTTTTCCTAATAAGAGAAGCT
 TCATTCTTACCCGCTCAACATTTGCTGGATCTGGAAGACATGCTGCGCATTGGTTAGGAGACAATACTGC
 TTCATGGGAACAAATGGAATGGTCTATAACTGGAATGCTGGAGTTCAGTTTGTGGGAATACCTTTGGTT
 GGAGCAGACATCTGTGGATTTGTGGCTGAAACCCACAGAAGAACTTTGCAGAAGATGGATGCAACTTGGGG
 CATTTTATCCATTTTCCAGAAACCATAATTCTGACGGATATGAACATCAGGATCCTGCATTTTTTGGGCA
 GAATTCACTTTTGGTTAAATCATCAAGGCAGTATTTAACTATTCGCTACACCTTATTACCTTCCCTCTAC
 ACTCTGTTTTATAAAGCCCATGTGTTTGGAGAAACAGTAGCAAGACCAGTTCTTCATGAGTTTTATGAGG
 ATACGAACAGCTGGATTGAGGACACTGAGTTTTTGTGGGGCCCTGCATTACTTATTACTCCTGTTCTAAA
 ACAGGGAGCAGATACTGTGAGTGCCTACATCCCTGATGCTATTTGGTATGATTATGAATCTGGTGCAAAA
 AGGCCATGGAGGAAACAACGGGTTGATATGTATCTTCCAGCAGACAAAATAGGATTACATCTTAGAGGAG
 GTTATATCATCCCATTCAAGAACCAGATGTAACAACAACAGCAAGCCGTAAAGATCCTCTAGGACTTAT
 AGTCGCATTAGGTGAAAACAACACAGCCAAAGGAGACTTTTTCTGGGATGATGGAGAACTAAAGATACA
 ATACAAAATGGCAACTACATATTATATACATTTTCAGTTTCTAATAACACATTAGATATTGTGTGCACAC
 ATTCATCATATCAGGAAGGAACTACCTTAGCATTTCAGACTGTAAAAATCCTTGGGTTGACAGACAGTGT
 TACAGAAGTTAGAGTGGCGGAAAATAATCAACCAATGAACGCTCATTCCAATTTCACTTATGATGCTTCT
 AACCAGGTTCTCCTAATTGCAGATCTCAAACCTTAATCTTGGAAAGAACTTATAGTGTTCATGGAATCAAA
 TTTTCTCAGAAAATGAAAGATTTAATTGTTATCCAGATGCAGATTTGGCAACTGAACAAAAGTGACACACA
 ACGTGGCTGTGTATGGAGAACGGGTTCTTCTCTATCCAAGCACCTGAGTGTACTTTCCAGACAAGAT
 AACTCTTATTCAGTCAACTCAGCTCGCTATTTCATCCATGGGTATAACAGCTGACCTCCAACATAACTG
 CAAATGCCAGAATAAAGTTACCTTCTGACCCCATCTCACTCTTCGTGTGGAGGTGAAATATCACAAAA
 TGATATGTTGCAGTTAAGATTTATGATCCCAAAAAGAAGAGATATGAAGTACCAGTACCCTTAAACAT
 CCAACCACCCCAATAAGTACTTATGAAGACAGACTTTTATGATGTGGAAATCAAGGAAAATCCTTTGGCA
 TCCAGATTCGACGAGAGAAGCAGTGGAAAGTCAATTTGGGATTCTTGGCTGCCTGGATTTGCTTTTAAATGA
 CCAGTTCAATCAATATCGACTCGCTGCCATCAGAATATATATATGGTTTTGGGGAAGTGAACATACA
 GCATTTAAGCGAGATCTGAACTGGAATACTTGGGGAATGTTACAAAGAGACCAACCCCTGGTTACAAAAC
 TTAATTCCTATGGATTTTATCCCTATTACATGGCTCTGGAAGAGGAGGGCAATGCTCATGGTGTTCCT
 ACTCAACAGCAATGCAATGGATGTTACATTCCAGCCAACCTCTGCTCTAACTTACCGTACAGTTGGAGGG
 ATCTTGGATTTTTATATGTTTTTGGGCCCAACTCCAGAAGTTGCAACAAAGCAATACCATGAAGTAATTG
 GCCATCCAGTCATGCCAGCTTATTGGGCTTTGGGATTCCAATTATGTCGTTATGGATATGCAAACTCTC
 AGAGGTTCCGGAATTATATGACGCTATGGTGGCTGCTAACATCCCCTATGATGTTGAGTACACAGACATT
 GACTACATGGAAGGCAGCTAGACTTTACAATTGGTGAAGCATTCCAGGACCTTCCCTCAGTTTGTGACA
 AAATAAGAGGAGAAGGAATGAGATACATTATTATCCTGGATCCAGCAATTTCCAGGAAATGAAACAAGAC
 TTACCCTGCATTTGAAAGAGGACAGCAGAATGATGTCTTTGTCAAATGGCCAAACACCAATGACATTTGT
 TGGGCAAGGTTTGGCCAGATTTGCCAACATAACAATAGATAAACTCTAACGGAAGATGAAGCTGTTA
 ATGCTTCCAGAGCTCATGTAGCTTTCCAGATTTCTTCCAGACTTCCACAGCAGAGTGGTGGCCAGAGA
 AATTGTGGACTTTTACAATGAAAAGATGAAGTTTGTGGTTTGTGGATTGATATGAATGAGCCATCAAGT
 TTTGTAATGGAACAACCTACTAATCAATGCAGAAATGACGAACTAAATTTACACCTTATTTCCAGAAC
 TCACAAAAAGAAGTATGATGATTACATTTTCCAGCAATTTGCATGGAAGCTGAGCAGATTTAGTGATGG
 AACATCAGTTTTGCATTACGATGTTTACAATCTCTATGGATGGTACAGATGAAACCTACTCATGATGCA
 TTGCAAGAAGACAACCTGGAAAAAGAGGGATTGTAATTTCTCGTTCCACGTATCCTACTAGTGGACGATGGG
 GAGGACACTGGCTTGGAGACAACATATGCACGATGGGACAACATGGACAAAATCAATCATTGGTATGATGGA
 ATTTAGTCTGTTTGAATGTCATATACTGGAGCAGACATCTGTGGTTTTTTCAACAACCTCAGAATATCAT
 CTCTGTACCCGCTGGATGCAACTTGGAGCATTTTATCCATACTCAAGGAATCACAACTTGCAAATACTA
 GAAGACAAGATCCCGCTTCTGGAATGAACTTTTGTGAAATGTCAAGGAATTTCTAAATATTAGATA
 CACCTTATTGCCCTATTTTACACACAATGCATGAAATTCATGCTAATGGTGGCACTGTATCCGACCC
 CTTTTGCATGAGTCTTTGATGAAAAACCAACCTGGGATATATTCAGCAGTTCTTATGGGGTCCAGCAT
 TTATGTTTACCCAGTACTGGAACCTTATGTTCAAACCTGTAATGCCTAGTCCCAATGCTCGGTGGTT
 TGACTACCATACAGGCAAGATATTGGCGTCAGAGGCAATTTCAAACATTTAATGCTTCTTATGACACA
 ATAAACCTACATGTCCGTGGTGGTCACATCCTACCATGTCAAGAGCCAGCTCAAAACACATTTTACAGTC
 GACAAAAACACATGAAGCTCATTGTTGCTGCAGATGATAATCAGATGGCAGAGGTTCTCTGTTTTGGGA
 TGATGGAGAGAGTATAGACACCTATGAAAGAGACCTATATTTATCTGTACAATTTAATTTAAACCAGACC

ACCTTAACAAGCACTATATTGAAGAGAGGTTACATAAATAAAAGTGAAACGAGGCTTGGATCCCTTCATG
TATGGGGGAAAGGAAGTACTCTGTCAATGCAGTTACTCTAACGTATAACGGAAATAAAATTCGCTTCC
TTTTAATGAAGACACTACCAACATGATATTACGTATTGATCTGACCACACACAATGTTACTCTAGAAGAA
CCAATAGAAATCAACTGGTCA

ACGCGTACGCGGCGGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC217558 representing NM_001041
Red=Cloning site Green=Tags(s)

MARKKFSGLEISLIVLFVIVTIIAIALIVVLATKTPAVDEISDSTSTPATRVTNTPSDSGKCPNVLNDP
VNVRRINCIPEQFPTEGICAQGCCWRPWNDSLIPWCFFVDNHGYNVQDMTTTISIGVEAKLNRIPSPTLFG
NDINSVLFTTQNTPNRFRFKITDPNRRRYEVPHQYVKEFTGPTVSDTL YDVKVAQNPFISIQVIRKSNKG
TLFDTSIGPLVYSDQYLQISTRLPSDYIYGIGEQVHKRFRHDL SWKTWPIFTRDQLPGDNNNLYGHQTF
FMCIEDTSGKSFVFLMNSNAMEIFIQPTPIVTVYRVTGGILDYFILLGDTPEQVVQYQQLVGLPAMPAY
WNLGFQLSRWNYKSLDVVKEVVRNREAGIPFDTQVTDIDYMEDKKDFTYDQVAFNGLPQFVQDLHDHGQ
KYVYIILDPAISIGRRANGTTYATYERGNQHVWINE SDGSTPIIGEVWGLTVYDPDTNPNCIDWWANEC
SIFHQEVQYDGLWIDMNEVSSFIQGSTKGCNVNKLNYPPFTPDILDKLMYSKTI CMDAVQNWGKYDVHS
LYGYSMAIATEQAVQKVPNKRSFILTRSTFAGSGRHAHHLGDNTASWEQMEWSITGMLEFSLFGIPLV
GADICGFVAETTEELCRRWMLGAFYPPSRNHNSDGYEHQDPAFFGQNSLLVKSSRQYL TIRYTLPLFLY
TLFYKAHVFGETVARPVLHEFYEDTNSWIEDTEFLWGPALLITPVLKQGADTVSAYIPDAI WYDYESGAK
RPWRKQVRVDMYLPADKIGLHLRGGYIIPIQEPDVTTTASRKNPLGLIVALGENNTAKGDFWDDGETKDT
IQNGNYILYTFVSNNLTDIVCTHSSYQEGTTLAFQTVKILGLTDSVTEVRVAENNQPMNAHSNFTYDAS
NQVLLIADLKLNLGRNFSVQWNQIFSENERFNCYPADLATEQKCTQRGCVWRTGSSLSKAPECYFPRQD
NSYSVNSARYSSMGITADLQLNTANARIKLPSPDPISTLRVEVKYHKNDMLQFKIYDPQKKRYEVPVPLNI
PTTPISTYEDRLYDVEIKENPFQIIRRRSSGRVIWDSWLPGFANDQFIQISTRLPSEYIYGFGEVEHT
AFKRDLNWNWGMFTRDQPPGYKLSYGFHPYMALEEEGNAHG VFLLNSNAMDVTFQPTPALTYRTVGG
ILDFYMF LGPTPEVATKQYHEVIGHVPMPAYWALGFQLCRYGYANTSEVRELYDAMVAANIPYDVQYTDI
DYMERQLDFTIGEAQDLQFVVKIRGEGMRYI IILDPAISGNETKTYPAFERGQQNDVFVKWPNTNDIC
WAKVWPDLPNITIDKTLTEDEAVNASRAHVAFDPDFRTSTA EWAREIVDFYNEKMKFDGLWIDMNEPSS
FVNGTTTNQCRNDELNYPPYFPELTKRTDGLHFRTICMEAEQILSDGTSVLHYDVHNL YGWSQMKPTHDA
LQKTTGKRGIVISRSTYPTSGRWGGHVLGDNYARWDMDKSIIIGMMEFSLFGMSYTGADICGFFNNEYH
LCTRWMQLGAFYPYSRNHNIANTRRQDPASWNETFAEMSRNILNIRYTL LPYFYTMHEIHANGGTVIRP
LLHEFFDEKPTWDIFKQFLWGP AFMVTPLVLEPYVQTVNAYV PNARWFDYHTGKDIGVRGQFQTFNASYDT
INLHVRGGHILPCQEPANQTFYSRQKHMKLIVAADDNQMAQGS LFWDGSEIDTYERDLYLSVQFNLNQT
TLTSTILKRGYINKSETRLGSLHVWGKTPVNAVTLTYNGNKNSLPFNE DTTNMILRIDLTTNNVTLEE
PIEINWS

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

Sgfl-MluI

Cloning Scheme:



ACCN: NM_001041

ORF Size: 5481 bp

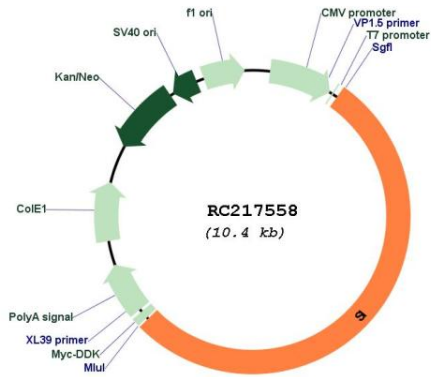
OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA 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:	NM_001041.4
RefSeq Size:	6021 bp
RefSeq ORF:	5484 bp
Locus ID:	6476
UniProt ID:	P14410
Cytogenetics:	3q26.1
Protein Families:	Druggable Genome, Transmembrane
Protein Pathways:	Metabolic pathways, Starch and sucrose metabolism
MW:	209.3 kDa
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 RC217558