

Product datasheet for **RR211829**

Sidt2 (NM_001108142) Rat Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Sidt2 (NM_001108142) Rat Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Sidt2
Synonyms:	RGD1308311
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



[View online »](#)

ORF Nucleotide Sequence:

>RR211829 representing NM_001108142
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGACGTCAGCGGGCGGCGCAGCCCCGCTGTTTACCGCGGCGGCGCCTGGTGGCCCCGAGTTCTGTG
 CCGCGTCCGCGCCCTTAAAGGGCCCGCGTCCGGGAAGCCTACGGGCCAGGGCCACCGCCGCTCGGCTC
 TCCGGGCGGAGCGGACCGGGTCTCCAGCGGGCTGGGCGGGCTGGGGTTGCGGGTCCGCGTCCCGC
 CCACGCGAGCCGGGTCCGCGGAGGCCAGGAGCGGCTCCAGGGAGGGGACGCGTCTATCTCAGGCCG
 GGGTTAAAGTTCTGGTCCCGGTGAGATGCTGGAAGCTGCTGCGGCAGCCGCAACGCGCCCGTCCGCGT
 CCGTCCGACGCCCGCCGCCCGGGCCATGATCGCTGGCGTCTGCCCTTGTGCGTCTCTGGTGGCC
 GCCGTCGAGAGCCACCTGGGGCTCTGGGGCCAAAGACGTCGCGAGAAAGACGCGGAGTTTGAGCGCA
 CCTACGCGGACGACGCTAACAGCGAGCTAGTCAACATCTACACCTTCAACCACACCGTGACCCGCAACCG
 GACCGAGGGCGTCCGAGTGTCTGTGAACGTCCTGAACAAACAGAAAGGGGCGCCTTGTCTGTTGTTGCTC
 CGCAGAAAGGAGGCTGTTGTGTCCTCCAGGTGCCCTAATCCTGCGAGGGCTATACCAGCGTAAGTACC
 TCTACAAAAAGTTGAACGAACTCTGTGTCAGCCCCCACCAAGAATGAGTCTGAGATCCAGTTTTTCTA
 TGTGGATGTGCTACCCTGTACCAAGTCAATACCACTGCAGCCCAACCCAGTACTTCAAATACGAGT
 GTGCTCAGGACTGGGGAGCTGTTACCTTCAATACCACTGCAGCCCAACCCAGTACTTCAAATACGAGT
 TTCCTGATGGTGTGGACTCTGTCAATTGTCAAGGTGACCTCCAAGAAGGCCTTCCCTGCTGTGTCATCTC
 CATCCAGGATGTCCTGTGCCAGTCTATGATCTTGACAACAATGTAGCCTTATCGGCATGTACCAGACA
 ATGACTAAGAAGGACCCATCACTGTGCGAGGAAAGACTTCCCAGCAACAGTTTTTATGTGGTGGTGG
 TGGTGAAGACTGAGGACCAAGGCTGCGGGGGTCTTCCCTTCTACCCCTTCTGGAAGATGAACCACT
 GGATCAAGGGCACCGTCAAGAAACCTGTGAGTGGTCTCTCAGGCTGTCACTTCTGAGGCTACGTT
 GGTGGGATGCTCTTTGCTGGGCATATTCCTGTGTTCTACCTGCTGACTGTGCTGCTGGCCTGTTGGG
 AGAACTGGAGGCAAGGAAGAAGACCTTGTGGTGGCCATAGACCGAGCCTGCCAGAAAGCGGTACCC
 TCGGGTCTGGCTGATTCGTTTCTGGCAGTGCCTTATGAGGGTTACAACATAGGCTCTTTGAGAAT
 GGTTCGGATCCACTGACGGTTGGTTGAAAGCACAGGTTACGGGGACCTCTCTACAGTTACCAGGGGC
 ACGACAGTTCAAGCGGCGCCTCCCTTGCCAGATGCGGCAGCTGTGATTGCCATGGACCGCTCCTT
 TGACCCAGTGGGAGCTCGCCACGACTGGACTCCATGAGCTCCGTGGAAGAGGATGACTATGACACACTG
 ACTGACATCGACTCAGACAAAAACGTCATTGCAACCAAGCAATACCTCTGTGGCTGATCTGGCAGAA
 AGGACAAACGTTTACGGAAAAAGTACCAGATTTACTTCTGGAACATAGCCACCATTCAGTCTTCTA
 CGCCCTTCTGTGGTGCAGCTGGTGATCACCTACCAGACGGTGGTGAATGTCACGGGGAACAGGACATC
 TGCTACTACAACCTTCTGTGCCACCCACTGGGCAACCTCAGCGCCTTCAACAACATCCTCAGCAACC
 TGGGGTACATTCTGCTGGTCTGCTCTTCTGCTCATCATCTGCAGCGGGAGATCAATCATAACCGGGC
 CCTGCTGAGAAATGACCTCTATGCTCTGGAGTGTGGGATCCCCAACACTTTGGTCTATTTATGCCATG
 GGCACAGCGTTGATGATGGAGGGGCTACTGAGTGCCTGTACCACGTCTGCCCAACTACACCAACTTCC
 AGTTCGATACCTCGTTTATGATGATGCTGGCCTTGATGCTGAAGCTTACCAGAGCGGCACCC
 AGATATCAACGCCAGCGCTACAGCGCATACGCTGCTGGCCATTGTGATCTTCTCCGCTCGGGT
 GTGGTTTTTGGCAAAGGGAACACAGCCTTCTGGATCGTCTTCTCAGTCAATCCATATCATTCCACGCTT
 TCCTCAGCACTCAGCTGTATTACATGGGCCGCTGGAAGCTGGACTCCGGAATCTTCCGCCATCCTTCA
 TGTGCTCTACACAGACTGCATCCGGCAGTGCAGCGGGCCCTTACACGGACCGCATGGTCTTCTGGT
 ATGGGCAACATTCAACTGGTCTGCTGCTGCTACGGACTCATCATGCGCCAAATGACTTTGCTCCT
 ACTTGTGGCAATTGGCATCTGCAACTGCTGCTGATTTTGTCTTCTACATCATTATGAAGCTCCGGAG
 CGGCGAGAGGATCAAGCTCATCCCTGCTCTGCATCGTGTGCACCTCCGTGGTCTGGGGCTTCGCACTC
 TTCTTCTTCCAGGGACTCAGCACGTGGCAGAAAACCCCGCAGAGTCCAGGGAGCACACCGGACT
 GCATCCTCCTGACTTCTTTGATGACCAGACATCTGGCACTTCTGTCTCCATTGCTATGTTGGGTC
 CTCTCTGGTTTTATTGACGTTGGATGACGACTGGACACTGTACAGCGGACAAGATCTATGTCTC

ACGGGCCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGA
TTACAAGGATGACGACGATAAGGTTTAA

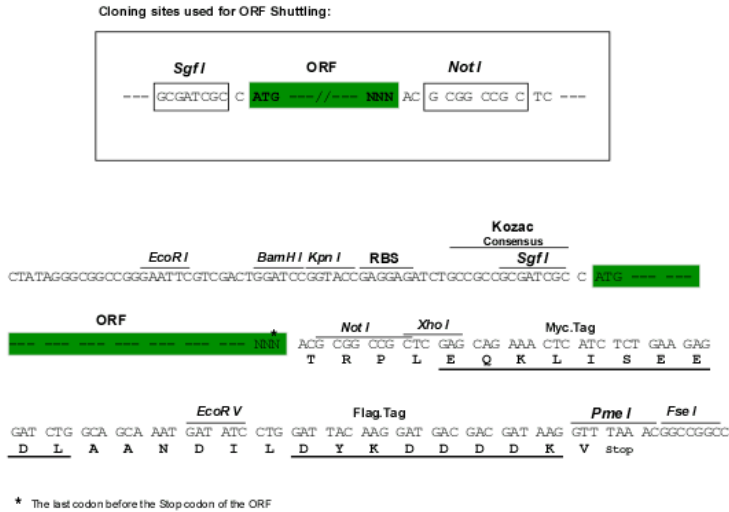
Protein Sequence: >RR211829 representing NM_001108142
 Red=Cloning site Green=Tags(s)

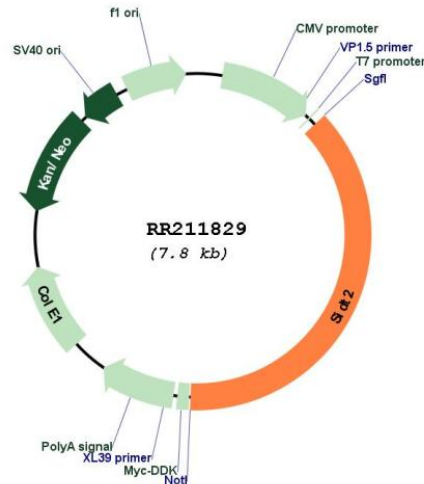
MTSAGGRSPA VYRGAAPGGPEFCAASAALKGPASGKPTGQGHRLGSPGASGRVSSRAGPGWGCGRRCR
 PREPGSARGPGAAPGRGRVLSQAGVKVLVPVRCWKLRLQPQRARSRRQPPPRAMIWRLPLCVLLVA
 AVESHLGALGPKNVSQKDAEFERTYADDVNSELVNIYTFNHTVTRNRTEGVRVSVNVLNKQKGA PLLFV
 RQKEAVVSFQVPLILRGLYQRKYLQKVERTLCQPPTKNESEIQFFYVDVSTLSPVNTTYQLRVNRVDNF
 VLRTGELFTFNNTAAQPQYFKYEFDPGVD SVIVKVT SKKAFPCSVISIQDVLCPVYDL DNNVAFIGMYQT
 MTKKAAITVQRKDFPNSFYVVVVVKTEDQACGSLPFYPFVEDEPVDQGHRQKTL SVLVSQAVTSEAYV
 GGMLFCLGIFLSFYLLTVLLACWENWRQRKKTLLVAIDRACPE SGHPRVLADSFPGSAPYEGNYGSFEN
 GSGSTDGLVESTGSGDLSYSYQGHQFKRRLPSGQMRQLCIAMDRSFD PVGARPRLDSMSSVEEDDYDTL
 TDIDSDKNVIRTKQYLCVADLARKDKRVL RKKYQIYF WNIATIAVFYALPVVQLVITYQT VVNVGTGNQDI
 CYNIFLCAHPLGNLSAFNNILSNLGYILLGLLFLLLIILQREINHNRALLRNDLYALECGIPKHFGLFYAM
 GTALMMEGLLSACYHVC PN YTNFQFDT SFMYMIAGLCMLKLYQKRHPDINASAYSAYA CLAIVIFFSVL G
 VVFGKNTAFWIVFSVIHIISTLLLSTQLYYMGRWKLD SGIFRRILHVL YDCIRQCSGPLYTDRM VLLV
 MGNIINWSLAAYGLIMRPNDFASYLLAIGCNLLLYFAFYIIMKLRSGERIKLIPLLCIVCTSVVWGFAL
 FFFFQGLSTWQKTPAESREHNRDCILLDFDHDH IWHFLSSIAMFGSFLVLLTDDDLDTVQRDKIYVF

TRPLEQKLI SEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-NotI

Cloning Scheme:



Plasmid Map:


ACCN: NM_001108142

ORF Size: 2937 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.

RefSeq: [NM_001108142.1](#), [NP_001101612.1](#)

RefSeq Size: 4741 bp

RefSeq ORF: 2940 bp

Locus ID: 315617

UniProt ID: [D3ZEH5](#)

Cytogenetics:	8q22
MW:	109.8 kDa
Gene Summary:	Mediates the translocation of RNA and DNA across the lysosomal membrane during RNA and DNA autophagy (RDA), a process in which RNA or DNA is directly imported into lysosomes in an ATP-dependent manner, and degraded. Involved in the uptake of single-stranded oligonucleotides by living cells, a process called gymnosis (By similarity). In vitro, mediates the uptake of linear DNA more efficiently than that of circular DNA, but exhibits similar uptake efficacy toward RNA and DNA. Binds long double-stranded RNA (dsRNA) (500 - 700 base pairs), but not dsRNA shorter than 100 bp (By similarity).[UniProtKB/Swiss-Prot Function]