

Product datasheet for **MR210871**

Sidt2 (NM_172257) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Sidt2 (NM_172257) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Sidt2
Synonyms:	B930096O19; BC023957; CGI-40
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>MR210871 representing NM_172257
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGATCGCCTGGCGTCTGCCCTTGTGCGTGCTCTTGGTGGCCTCCGTGAGAGCCACCTGGGGCCCTGG
 GGCCAAAGAACGTCTCGCAGAAAGACGCGGAGTTTGGAGCCACCTACGCGGACGACGTCAACAGCGAGCT
 GGTCAACATCTACACCTTCAACCACACCGTGACCCGCAACCGGACCGAGGGTGTGCGAGTGTCTGTGAAT
 GTCCTGAACAAGCAGAAAGGGGCGCCTTTGCTGTTTGTGGTCCGCCAGAAGGAGGCTGTTGTGCTCTTCC
 AGGTGCCCTAATCCTTCGAGGACTATATCAGCGGAAGTACCTCTACAAAAAGTGAACGAACTCTGTG
 TCAGCCCCCACCAGAATGAGTCTGAGATCCAGTTTTTCTATGTGGACGTGTCTACCCTGTACCCGTC
 AATACCACTTACCAGCTCCGAGTCAACCGTGTGGACAATTTGTGCTCAGGACTGGAGAGCTGTTACTT
 TTAATACCACTGCAGCCAGCCAGTACTTCAAATACGAGTTTCTGATGGTGTGGACTCGGTAATTTGT
 CAAGGTGACCTCCAAGAAGGCCCTCCCCTGCTCAGTCATCTCCATCCAAGATGTCTGTGCCCTGTCTAT
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 AGCGGAAAGACTTCCCCAGCAACAGCTTCTATGTGGTGGTGGTAGTGAAGACTGAGGACCAGGCCTGCGG
 AGGGTCTTTGCCCTTCTACCCCTTTGTGGAAGATGAGCCAGTGGATCAAGGGCACCGTCAGAAAACACTG
 TCAGTGTGGTCTCTCAGGCTGTACATCTGAGGCCTATGTTGGTGGGATGCTCTTTTGCCTGGGCATAT
 TCTTGTCTTCTACCTGCTGACTGTGCTGCTGGCCTGTTGGGAGAACTGGAGGCAAGGAAGAAGACCTT
 GCTGTTGGCCATAGACCGAGCCTGCCAGAAAGTGGTACGCCCCGGTCTTGGCTGATTCATTTCTTGGC
 AGTGCCCTTACGAGGGTTACAACATAGGCTCCTTTGAAAATGGTCCGGATCCACTGACGGGTTGGTTG
 AAAGCGCAGGTTACAGGGACCTCCTACAGTTACCAGGACCGCTCCTTTGACGCACTGGGTCCTCGGCC
 TCGACTGGACTCCATGAGCTCCGTGGAAGAGGATGACTACGACACACTGACTGACATCGACTCAGACAAA
 AACGTCATTGCAACCAAGCAATACCTCTGTGTGGCTGATCTGGCAGAAAGGACAACGTTTTTGCAGGA
 AAAAGTACCAGATTTACTTCTGGAACATAGCCACCATTGCGGTCTTCTACGCACTTCTGTGGTGCAGCT
 GGTGATCACCTACCAGACGGTGGTGAATGTCACAGGGAACAGGACATCTGCTACTACAACCTTCTCTGT
 GCCACCCGCTGGGCAACCTCAGCGCCTTCAACAACATCCTCAGCAACTTGGGGTACATCTGCTGGGGC
 TGCTCTTCTGCTCATCATCTGCAGCGAGAGATCAATCATAACCGGGCCCTGCTGCGGAATGACCTCTA
 TGCTCTGGAGTGTGGGATCCCCAACACTTTGGTCTGTTTTACGCCATGGGCACAGCACTGATGATGGAG
 GGGCTACTTAGTGCCTGTACCACGTCTGCCCCAACTACACCAACTTCCAGTTTGATACCTCCTTATGT
 ACATGATTGCTGGCCTTGCATGCTGAAGCTCTACCAGAAGCGGCACCCAGATATCAACGCCAGTGCCTA
 CAGTGCATATGCCTGCTTGGCCATCGTCATCTTCTTCTCCGTTCTGGGCGTGGTGTGGCAAAGGGAAC
 ACGGCCTTCTGGATTGTCTTCTCCGTCATTACATCATCTCCACCCTGCTCCTCAGCACTCAGCTTATT
 ACATGGGCGCTGGAAGCTGGACTCCGGGATCTTCCGCCGATCCTCCATGTGCTCTACACAGACTGCAT
 CCGGCAGTGCAGCGGGCCCTTTACAGGACCGCATGGTGTCTTGGTGCATGGGCAACATTATCAACTGG
 TCGCTGGCTGCATACGGACTCATATGCGCCCCAATGACTTTGCTTCTACTTGTGGAATTGGCATCT
 GCAACCTGCTGCTTTATTTGCTTCTACATCATATGAAGCTCCGGAGCGGCGAGAGGATCAAGCTCAT
 CCCTCTGCTGCTGCTGCTGACCTCCGTGGTCTGGGCTTCCGCTCTTCTTCTTCCAGGGACTG
 AGCACGTGGCAGAAAACCCCGCAGAGTCCAGGGAGCACAAACCGGACTGCATCCTCCTCGACTTCTTG
 ATGACCACGATATCTGGCACTTCTGCTCCTCATTGCCATGTTTGGGTCCTTCTGGTTTTGCTGACGTT
 GGATGACGACTTGGACACAGTACAGCGGACAAGATCTATGTCTTC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >MR210871 representing NM_172257
Red=Cloning site Green=Tags(s)

MIAWRLPLCVLLVASVESHGALGPKNVSQKDAEFERTYADDVNSELVNIYTFNHTVTRNRTEGVRVSVN
VLNKQKGAPLLFVVRQKEAVVSFQVPLILRGLYQRKYLQKVERTLCQPPTKNESEIQFFYVDVSTLSPV
NTTYQLRVNRVDNFVLRGTGELFTFNNTAAQPQYFKYFDPDGVDSVIVKVTSKKAFPCSVISIQDVLCPVY
DLDNVAFVIGMYQTMTKAAITVQRKDFPSNSFYVVVVVKTEDQACGGSLPFYPFVEDEPVDQGHRQKTL
SVLVSQAVTSEAYVGGMLFCLGIFLSFYLLTVLLACWENWRQRKKTLLLAIDRACPESGHARVLADSFPG
SAPYEGYNYGSFENGSGSTDGLVESAGSGDLSYSYQDRSFDVAVGPRPRLDMSSSVEEDDYDTLTDIDSDK
NVIRTKQYLCVADLARKDKRVLRRKKYQIYFVNIATIAVFYALPVVQLVITYQTVVNVNVTGNQDICYNFLC
AHPLGNLSAFNNILSNLGYILLGLLFLLIILQREINHNRALLRNDLYALECGIPKHFGLFYAMGTALMME
GLLSACYHVCPNYTNFQFDTSFMYMIAGLCMLKLYQKRHPDINASAYSAYACLAIVIFFSVLGVVFGKGN
TAFWIVFSVIHIISTLLSTQLYYMGRWKLDSGIFRRILHVLYTDCIRQCSGPLYTDRMVLLVMGNIINW
SLAAYGLIMRPNDFASYLLAIGICNLLLYFAFYIIMKLRSGERIKLIPLLCIVCTSVVWGFALFFFQGL
STWQKTPAESREHNRDCILLDFDDHDIWHFLSSIAMFGSFLVLLTLDDDLDTVQRDKIYVF

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: Sgfl-Mlul

Cloning Scheme:



ACCN: NM_172257

ORF Size: 2496 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_172257.4](#), [NP_758461.1](#)

RefSeq Size: 4221 bp

RefSeq ORF: 2499 bp

Locus ID: 214597

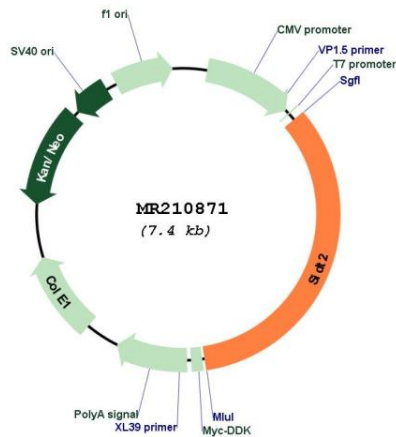
UniProt ID: [Q8CIF6](#)

Cytogenetics: 9 A5.2

MW: 95 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 and DNA is directly imported into lysosomes in an ATP-dependent manner, and degraded (PubMed:27046251, PubMed:27846365, PubMed:28724756). Involved in the uptake of single-stranded oligonucleotides by living cells, a process called gymnosis (PubMed:28277980). In vitro, mediates the uptake of linear DNA more efficiently than that of circular DNA, but exhibits similar uptake efficacy toward RNA and DNA (PubMed:27846365). Binds long double-stranded RNA (dsRNA) (500 - 700 base pairs), but not dsRNA shorter than 100 bp (PubMed:26067272).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR210871