

Product datasheet for **MG210871**

Sidt2 (NM_172257) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Sidt2 (NM_172257) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Sidt2
Synonyms:	B930096O19; BC023957; CGI-40
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>MG210871 representing NM_172257
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGATCGCCTGGCGTCTGCCCTTGTGCGTGCTCTTGGTGGCCTCCGTCGAGAGCCACCTGGGGGCCCTGG
 GGCCAAAGAACGTCTCGCAGAAAGACGCGGAGTTTGAGCGCACCTACGCGGACGACGTCAACAGCGAGCT
 GGTCAACATCTACACCTTCAACCACACCGTGACCCGCAACCGGACCGAGGGTGTGCGAGTGTCTGTGAAT
 GTCCTGAACAAGCAGAAAGGGGCGCCTTTGCTGTTTGTGGTCCGCCAGAAGGAGGCTGTTGTGCTCTTCC
 AGGTGCCCTAATCCTTCGAGGACTATATCAGCGGAAGTACCTCTACAAAAAGTGAACGAACTCTGTG
 TCAGCCCCCACCAAGAATGAGTCTGAGATCCAGTTTTTCTATGTGGACGTGTCTACCCTGTACCCGTC
 AATACCACTTACCAGCTCCGAGTCAACCGTGTGGACAATTTGTGCTCAGGACTGGAGAGCTGTTACTT
 TTAATACCACTGCAGCCAGCCAGTACTTCAAATACGAGTTTCTGATGGTGTGGACTCGGTAATTGT
 CAAGGTGACCTCCAAGAAGGCCCTCCCCTGCTCAGTCATCTCCATCCAAGATGTCTGTGCCCTGTCTAT
 GATCTGGACAACAATGTAGCCTTATTGGCATGTACCAGACGATGACTAAGAAGGAGCCATCACTGTGC
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 AGGGTCTTGGCCTTCTACCCCTTTGTGGAAGATGAGCCAGTGGATCAAGGGCACCGTCAGAAAACACTG
 TCAGTGTGGTCTCTCAGGCTGTACATCTGAGGCCTATGTTGGTGGGATGCTCTTTTGCCTGGGCATAT
 TCTTGTCTTCTACCTGCTGACTGTGCTGCTGGCCTGTTGGGAGAACTGGAGGCAAGGAAGAAGACCTT
 GCTGTTGGCCATAGACCGAGCCTGCCAGAAAGTGGTACGCCCCGGTCTTGGCTGATTCATTTCTGCG
 AGTGCCCTTACGAGGGTTACAACATAGGCTCCTTTGAAAATGGTCCGGATCCACTGACGGGTTGGTTG
 AAAGCGCAGGTTACAGGGACCTCCTACAGTTACCAGGACCGCTCCTTTGACGCACTGGGTCCTCGGCC
 TCGACTGGACTCCATGAGCTCCGTGGAAGAGGATGACTACGACACACTGACTGACATCGACTCAGACAAA
 AACGTCATTGCAACCAAGCAATACCTCTGTGTGGCTGATCTGGCAGAAAGGACAACAGTGTGTTTGC
 GGA
 AAAAGTACCAGATTTACTTCTGGAACATAGCCACCATTGCGGTCTTCTACGCACTTCTGTGGTGCAGCT
 GGTGATCACCTACCAGACGGTGGTGAATGTCACAGGGAACAGGACATCTGCTACTACAACCTCCTCTGT
 GCCACCCGCTGGGCAACCTCAGCGCCTTCAACAACATCCTCAGCAACTTGGGGTACATCCTGCTGGGGC
 TGCTCTTCTGCTCATCATCCTGCAGCGAGAGATCAATCATAACCGGGCCCTGCTGCGGAATGACCTCTA
 TGCTCTGGAGTGTGGGATCCCCAACACTTTGGTCTGTTTACGCCATGGGCACAGCACTGATGATGGAG
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 ACATGATTGCTGGCCTCTGCATGCTGAAGCTCTACCAGAAGCGGCACCCAGATATCAACGCCAGTGCCTA
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 ACGGCCTTCTGGATTGTCTTCTCCGTCATTACATCATCTCCACCTGCTCCTCAGCACTCAGCTTATT
 ACATGGGCGCTGGAAGCTGGACTCCGGGATCTCCGCGGCATCCTCCATGTGCTCTACACAGACTGCAT
 CCGGCAGTGCAGCGGGCCCTTTACACGGACCGCATGGTCTTCTGGTATGGGCAACATTATCAACTGG
 TCGCTGGCTGCATACGGACTCATATGCGCCCCAATGACTTTGCTTCTACTTGTGGAATTGGCATCT
 GCAACCTGCTGCTTTATTTGCTTCTACATCATATGAAGCTCCGGAGCGGCGAGAGGATCAAGCTCAT
 CCCTCTGCTGCTATCGTCTGCACCTCCGTGGTCTGGGCTTCCGCTCTTCTTCTTCCAGGGACTG
 AGCACGTGGCAGAAAACCCCGCAGAGTCCAGGGAGCACAACCGGACTGCATCCTCCTCGACTTCTTTG
 ATGACCACGATATCTGGCACTTCTGCTCCTCATTGCCATGTTTGGGTCCTTCTGGTGTGCTGACGTT
 GGATGACGACTTGGACACAGTACAGCGGACAAGATCTATGTCTTC

ACGGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence: >MG210871 representing NM_172257
Red=Cloning site Green=Tags(s)

MIAWRLPLCVLLVASVESHGALGPKNVSQKDAEFERTYADDVNSELVNIYTFNHTVTRNRTEGVRVSVN
VLNKQKGAPLLFVVRQKEAVVSFQVPLILRGLYQRKYLQKVERTLCQPPTKNESEIQFFVYDVSTLSPV
NTTYQLRVNRVDNVLRTGELFTFNTTAAQPQYFKYFDPDGVDSVIVKVTSKKAFPCSVISIQDVLCPVY
DLDNVAFIGMYQTMTKKAAITVQRKDFPSNSFYVVVVVKTEDQACGGSLPFYPFVEDEPVDQGHRQKTL
SVLVSQAVTSEAYVGGMLFCLGIFLSFYLLTVLLACWENWRQRKKTLLLAIDRACPESGHARVLADSFPG
SAPYEGYNYGSFENGSGSTDGLVESAGSGDLSYSYQDRSFDVAVGPRPRLDMSSSVEEDDYDTLTDIDSDK
NVIRTKQYLCVADLARKDKRVLRRKYYQIYFVNIATIAVFYALPVVQLVITYQTVVNVNVTGNQDICYNFLC
AHPLGNLSAFNNILSNLGYILLGLLFLLIILQREINHNRALLRNDLYALECGIPKHFGLFYAMGTALMME
GLLSACYHVCNPYTNFQFDTSFMYMIAGLCMLKLYQKRHPDINASAYSAYACLAIVIFFSVLGVVFGKGN
TAFWIVFSVIHIISTLLSTQLYYMGRWKLDSGIFRRIHVLYTDCIRQCSGPLYTDRMVLLVMGNIINW
SLAAYGLIMRPNDFASYLLAIGICNLLLYFAFYIIMKLRSGERIKLIPLLCIVCTSVVWGFALFFFQGL
STWQKTPAESREHNRDCILLDFDDHDIWHFLSSIAMFGSFLVLLTLDDDLDTVQRDKIYVF

TRTRPLE - GFP Tag - V

Restriction Sites: Sgfl-MluI

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

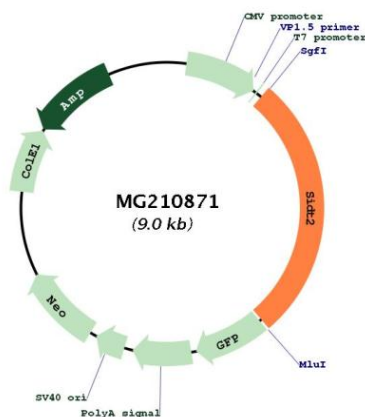
Locus ID: 214597

UniProt ID: [Q8CIF6](#)

Cytogenetics: 9 A5.2

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 MG210871