

## Product datasheet for **RC220528**

### **SIDT2 (NM\_001040455) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	SIDT2 (NM_001040455) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	SIDT2
Synonyms:	CGI-40
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

**ORF Nucleotide Sequence:**

>RC220528 representing NM\_001040455  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGTTTCGCTCTGGGCTTGCCTTCTTGGTGTCTTGGTGGCTCGGTTCGAGAGCCATCTGGGGTTCTGG  
 GGCCCAAGAACGTCTCGCAGAAAGACGCCGAGTTTGGAGCCACCTACGTGGACGAGGTCAACAGCGAGCT  
 GGTCAACATCTACACCTTCAACCATACTGTGACCCGCAACAGGACAGAGGGCGTGCCTGTGTCTGTGAAC  
 GTCCTGAACAAGCAGAAGGGGGCGCGTTGCTGTTTGGTCCGCCAGAAGGAGGCTGTGGTGTCTTCC  
 AGGTGCCCTAATCCTGCGAGGGATGTTTCAGCGCAAGTACCTCTACAAAAAGTGAACGAACCTGTG  
 TCAGCCCCCACCAAGAATGAGTCGAGATTCACTTCTTCTACGTGGATGTGTCCACCCTGTCCACAGTC  
 AACACCACATACCAGCTCCGGGTACGCCGATGGACGATTTTGTGCTCAGGACTGGGAGCAGTTACAGT  
 TCAATACCACAGCAGCACAGCCCAGTACTTCAAGTATGAGTTCCTGAAGGCGTGGACTCGGTAATTGT  
 CAAGGTGACCTCCAACAAGGCCCTCCCCTGCTCAGTCATCTCCATTCAGGATGTGTGTCTGTCTGTCTAT  
 GACCTGGACAACAACGTAGCCTTCATCGGCATGTACCAGACGATGACCAAGAAGGCGGCCATCACCGTAC  
 AGCGCAAAGACTTCCCCAGCAACAGCTTTATGTGGTGGTGGTGAAGACCGAAGACCAAGCCTGCGG  
 GGGCTCCCTGCCTTTCTACCCCTTCGCAGAAGATGAACCGGTTCGATCAAGGGCACCGCCAGAAAACCTG  
 TCAGTGTGGTGTCTCAAGCAGTCACGTCTGAGGCATACGTCAAGTGGATGCTCTTTTGCCTGGGTATAT  
 TTCTCTCTTTTACCTGCTGACCGTCTCTGGCTGTGGGAGAAGTGGAGGCAGAAGAAGAAGACCT  
 GCTGGTGGCCATTGACCGAGCCTGCCAGAAAGCGGTACCCTCGAGTCTGGCTGATTCTTTTCTGGC  
 AGTCCCTTATGAGGGTTAACTATGGCTCTTTGAGAATGTTTCTGGATCTACCGATGGTCTGGTTG  
 ACAGCGTGGCACTGGGACCTCTTTACGGTTACCAGGGCCGCTCTTTGAACCTGTAGGTACTCGGCC  
 CCGAGTGGACTCCATGAGCTCTGTGGAGGAGTACTACGACACATTGACCGACATCGATTCCGACAAG  
 AATGTCATTTCGACCAAGCAATACCTCTATGTGGCTGACCTGGCACGGAAGGACAAGCGTGTCTGCGGA  
 AAAAGTACCAGATCTACTTCTGGAACATTGCCACCATTGTGTCTTCTATGCCCTTCTGTGGTGCAGCT  
 GGTGATCACCTACCAGACGGTGGTGAATGTACAGGGAATCAGGACATCTGCTACTACAACCTTCTCTGC  
 GCCACCCACTGGGCAATCTCAGCGCTTCAACAACATCCTCAGCAACCTGGGGTACATCTGCTGGGGC  
 TGCTTTTCTGCTCATCATCTGCAACGGGAGATCAACCACAACCGGGCCCTGCTGCGCAATGACCTCTG  
 TGCCCTGGAATGTGGATCCCCAACACTTTGGGCTTTTCTACGCCATGGGCACAGCCCTGATGATGGAG  
 GGGCTGCTCAGTCTTGTATCATGTGTGCCCCAACTATACCAATTTCCAGTTTGACACATCGTTTATGT  
 ACATGATCGCCGACTCTGCATGCTGAAGCTCTACCAGAAGCGGCACCCGGACATCAACGCCAGCGCCTA  
 CAGTGCCTACGCCTGCCTGGCCATTGTCATCTTCTTCTGTGCTGGGCGTGGTCTTTGGCAAAGGGAAC  
 ACGGCGTTCTGGATCGTCTTCTCCATCATTACATCATCGCCACCCTGCTCCTCAGCACGACGCTTATT  
 ACATGGGCGGTGGAACCTGGACTCGGGGATCTCCGCCGCATCTCCACGTGCTCTACACAGACTGCAT  
 CCGGCAGTGCAGCGGGCCGCTCTACGTGGACCGCATGGTGTGCTGGTCAATGGGCAACGTCATCAACTGG  
 TCGCTGGCTGCCTATGGGCTTATCATGCGCCCCAATGATTTGCTTCTACTTGTGGCCATTGGCATCT  
 GCAACCTGCTCCTTTACTTCGCCTTCTACATCATGAAGCTCCGGAGTGGGGAGAGGATCAAGCTCAT  
 CCCCTGCTCTGCATCGTTTGCACCTCCGTGGTCTGGGGCTTCGCGCTCTTCTTCTTCCAGGGACTC  
 AGCACCTGGCAGAAAACCCCTGCAGAGTCGAGGGAGCACAAACCGGACTGCATCCTCCTCGACTTCTTG  
 ACGACCACGACATCTGGCACTTCTCTCTCCATCGCCATGTTCCGGTCTTCTCTGGTGTGCTGACACT  
 GGATGACGACCTGGATACTGTGCAGCGGACAAGATCTATGTCTTC

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >RC220528 representing NM\_001040455  
 Red=Cloning site Green=Tags(s)

```

MFALGLPFLVLLVASVESHGVLGPKNVSQKDAEFERTYVDEVNSELVNIYTFNHTVTRNRTEGVRVSVN
VLNKQKGAPLLFVVRQKEAVVSFQVPLILRGMFQRKYLQKVERTLCQPPTKNESEIQFFYVDVSTLSPV
NTTYQLRVSRMDDFVLRTEGEQFSFNNTAAQPQYFKYEFPEGVDSVIVKVTSNKAFPCSVISIQDVLCPVY
DLDNVAFVIGMYQTMKKAAITVQRKDFPSNSFYVVVVVKTEDQACGGSLPFYFPAEPEPVDQGHRQKTL
SVLVSQAVTSEAYVSGMLFCLGIFLSFYLLTVLLACWENWRQKKKTLVAIDRACPESGHPRVLADSFPG
SSPYEGYNYGSFENVSGSTDGLVDSAGTGDL SYGYQGRSFEPVGTTRPRVDSMSSVEEDDYDTLTDIDSDK
NVIRTKQYLYVADLARKDKRVLRRKKYQIYFVNIATIAVFYALPVVQLVITYQTVVNVNVTGNQDICYNFLC
AHPLGNLSAFNNILSNLGYILLGLLFLLIILQREINHNRALLRNDLCALECGIPKHFGLFYAMGTALMME
GLLSACYHVCPNYTNFQFDT SFMYMIAGLCMLKLYQKRHPDINASAYSAYACLAIVIFFSVLGVVFGKGN
TAFWIVFSIIHIIATLLSTQLYYMGRWKLDSGIFRRILHVLYTDCIRQCSGPLYVDRMVLLVMGNVINW
SLAAYGLIMRPNDFASYLLAIGICNLLLYFAFYIIMKLRSGERIKLIPLLCIVCTSVVWGFALFFFQGL
STWQKTPAESREHNRDCILLDFDDHDIWHFLSSIAMFGSFLVLLTLDDDLDTVQRDKIYVF
  
```

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

**Restriction Sites:** Sgfl-MluI

**Cloning Scheme:**


**ACCN:** NM\_001040455

**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\\_001040455.2](#)

**RefSeq Size:** 3919 bp

**RefSeq ORF:** 2499 bp

**Locus ID:** 51092

**UniProt ID:** [Q8NBJ9](#)

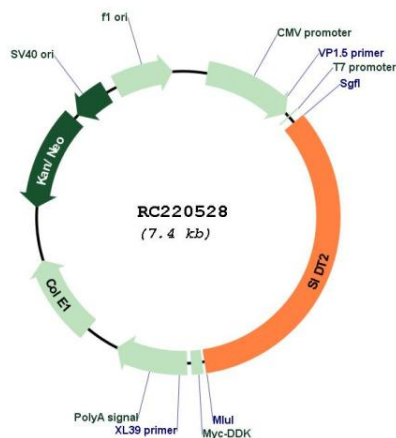
**Cytogenetics:** 11q23.3

**Protein Families:** Transmembrane

**MW:** 94.3 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 (PubMed:27046251, PubMed:27846365). Involved in the uptake of single-stranded oligonucleotides by living cells, a process called gymnosis (PubMed:28277980). Involved in the uptake of single-stranded oligonucleotides by living cells, a process called gymnosis. 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]

### Product images:



Circular map for RC220528