

Product datasheet for **MR231267**

Sort1 (NM_001271599) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Sort1 (NM_001271599) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Sort1
Synonyms:	2900053A11Rik; AI852375; Ntr3; Ntsr3
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



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ORF Nucleotide Sequence:

>MR231267 representing NM_001271599
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGGAGCGGCCCGGGGAGCTGCGGACGGCCTTTTGGCGTGGCCCTCGGCCTCCTCTGCTCCTTCAAC
 TGCTGCCTCCTGCCGCCGTCGGCCAGGACCGGCTGGACGCGCCGCGCCGCCCGCCGCTCCTCTGCTGCG
 CTGGGCGCGTCCGGTTCGGGTGAGCTGGGGCTGCGCGCCGCGCGCCGGGGGCCCCGTCGCCCGCGCT
 GGCCGTTGGCGCCGCGCGCCGCCGAGGACCAAGACTGCGGCCGCTCCCGACTTCATCGCCAAGC
 TGACCAACAATACGCACCAGCATGTCTTTGATGACCTCAGTGGCTCAGTGTCTTGTCTGGGTTGGAGA
 CAGCACTGGGGTTATTCTCGTCTGACCCTTTCCAAGTGCCTCTGGTAATTGTGAGCTTTGGACAGTCC
 AAGTTGTATCGAAGTGAAGATTATGAAAGAACTTAAGGATATTACAAATCTCATCAATAACACCTTCA
 TTCGGACGGAATTTGGCATGGCTATTGGTCTGAGAAGTCTGAAAGGTGATACTAACAGCGGAGGTGTC
 CGGGGAAAGCCGAGGCGGAAGAGTGTTCAGGTCATCAGACTTTGCCAAGAAGTTTGTGCAACAGATCTC
 CCCTTTCATCCTCTGACGCAGATGATGTACAGCCCTCAGAATTCGATTACCTGTAGCTCTCAGCACCG
 AAAATGGCCTGTGGGTGTCCAAGAATTTGGGGAAAAATGGGAAGAAATCCACAAAGCAGTATGTTTGGC
 CAAATGGGGACCAAAACAATCATCTTCTTTACCACCCATGTGAATGGCTCCTGCAAAGCTGATCTTGGT
 GCCCTGGAATATGGAGAATCCGACTTGGGAAAAACCTTCAAACCATTTGGTGTGAAAATCTACTCCT
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 ATCCTGGCAGCCAATGAGGACATGGTCTTTCATGCATGTAGATGAACCTGGAGATACCGGGTTTGGCACCA
 TCTTTACCTCTGATGATCGAGGCAATGTCTACTCCAAGTCTCTGGACAGACATCTATACCACCAAGG
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 AACTCTATTACAGAGCATGATCACTTTTACCAGGGAGGACGGTGGGAGCACCTGCGGAAGCCGGAGAACA
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 CCAGAAGCTAAACGTTCCAATGGCCCACTTCCGAGCCCAATGCTGTGGGCATAGTCATCGCTCACGGT
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 CAGCAACCGTCTATCAATGTGATTAAGTTCTCCACAGATGAAGGCCAGTGTGGCAGAGCTATGTGTT
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 ACCTCCCACGCTAAAAGCGGATATCACGACGACTCAGATGAGGACCTCCTGGAA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >MR231267 representing NM_001271599
Red=Cloning site Green=Tags(s)

MERPRGAADGLLRWPLGLLLLLQLLPPAAVQDRLDAPPPPAPLLRWAGPVGVSWGLRAAAPGGPVPRAGRWRGAPAEDQDCGRLPDFIAKLTNNTHQHVFDDLSGSVLSWVGDSTGVILVLTTFQVPLVIVSFGQSKLYRSEDYGNFKDITNLINNTFIRTEFGMAIGPENSGKVILTAEVSGGSRGGRVFRSSDFAKNFVQTDLPFHPLTQMMYSPQNSDYLLALSTENGLWVSKNFGEKWEEIHKAVCLAKWGPNNIIFFTTHVNGSCKADLGALELWRTSDLGKTFKTIQVKIYSFGLGGRFLFASVMADKDTTRRIHVSTQGDWTWMAQLPSVGQEQFYSILAANEDMVMHVDEPGDTGFGTIFTSDDRGIVYKSLDRHLYTTTGGETDFTNVTSLRGVYITSTLSEDNSIQSMITFDQGGRWELRKPENSKCDATAKNKNECSLHIHASYISQKLNVPMAPLSEPNVAVGIVIAHGSVGDAISVMVPDYVISDDGGYSWAKMLEGPHYITLDSSGGIIVAEIHSNRPINVIKFDSTDEGQCWQSYVFTQEPYIFTGLASEPGARSMNISIWGFTEFITRQWVSYSYVDFKIDILERNCEEDDYTWLAHSTDPGDYKDCGILGYKEQFLRLRKSSVCQNGRDYVVAQPSVPCSLDFLCDFGYFRPENASECQEPELKGHELEFCLYGKEEHLTTNGYRKIPGDKCQGGMNPAREVKDLKKKCTSNFLNPTKQDSRPQGHSLSQNPAPPPLGYTENHFLSPTQKQNSKNSVPIILAIIVGLMLVTVVAGVLIVKKYVCGGRFLVHRYSVLQQHAEADGVEALDSTSHAKSGYHDDSDEDLLE

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: Sgfl-MluI

ACCN:	NM_001271599
ORF Size:	2574 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:	<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_001271599.1 , NP_001258528.1
RefSeq Size:	6950 bp
RefSeq ORF:	2577 bp
Locus ID:	20661
UniProt ID:	Q6PHU5
Cytogenetics:	3 F3
MW:	95.3 kDa
Gene Summary:	Functions as a sorting receptor in the Golgi compartment and as a clearance receptor on the cell surface. Required for protein transport from the Golgi apparatus to the lysosomes by a pathway that is independent of the mannose-6-phosphate receptor (M6PR). Also required for protein transport from the Golgi apparatus to the endosomes. Promotes neuronal apoptosis by mediating endocytosis of the proapoptotic precursor forms of BDNF (proBDNF) and NGFB (proNGFB). Also acts as a receptor for neurotensin. May promote mineralization of the extracellular matrix during osteogenic differentiation by scavenging extracellular LPL. Probably required in adipocytes for the formation of specialized storage vesicles containing the glucose transporter SLC2A4/GLUT4 (GLUT4 storage vesicles, or GSVs). These vesicles provide a stable pool of SLC2A4 and confer increased responsiveness to insulin. May also mediate transport from the endoplasmic reticulum to the Golgi.[UniProtKB/Swiss-Prot Function]