

Product datasheet for **RC204131**

SLC33A1 (NM_004733) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	SLC33A1 (NM_004733) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	SLC33A1
Synonyms:	ACATN; AT-1; AT1; CCHLND; SPG42
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>RC204131 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGTCACCCACCATCTCCACAAGGACAGCAGCCGGCAACGGCGGCCAGGAATTCAGTCACTCTCTGG
 ATATGAAGAGCGGTCCCTGCCGCCAGGCGGTTGGGATGACAGTCATTTGGACTCAGCGGCCGGGAAGG
 GGACAGAGAAGCTCTTCTGGGGATACCGGCACTGGCGACTTCTTAAAAGCCCCACAGAGCTTCCGGGCC
 GAACTAAGCAGCATTTTGTCTACTACTCTTTCTTTACGTGCTTCAGGGTATCCCTGGGCTTGGCGGGAA
 GCATCCCCTCATTTTGC AAAGCAAAAATGTTAGCTATACAGACCAAGCTTTCTCAGTTTTGTCTTTT
 GCCCTCAGTCTCAAATTACTCTGGGCCCGTTGGTTGATGCGGTCTACGTTAAGAACTCGGTCGTCGC
 AAATCTTGGCTTGTCCGACACAGTATACTAGGACTCTTCATGATCTATTTATCCACTCAGGTGGACC
 GTTTGCTTGGGAATACCGATGACAGAACACCCGACGTGATTGCTCTCACTGTGGCGTTCTTTTTGTTTGA
 ATCTTGGCCGCACTCAGGACATTGCCGTCGATGGTTGGCGTTAACTATGTTATCCAGGAAAATGTG
 GGTATGCTTCTACTTGCAATTCGGTGGGCCAAACAGCGGTTACTTTTTGGGCAATGTTTTGTTTTTGG
 CCCTTGAATCTGCCGACTTTTGTAACAAAATTTGCGGTTTCAGCCTCAACCCAGAGGAATCGTTACTCT
 TTCAGATTTCTTTTTTCTGGGAACTGTATTTTAAACAACAACATTGGTTGCCCTTCTGAAAAA
 GAAAACGAAGTATCAGTAGTAAAAGAAGAAACAAGGGATCACAGATACTTACAAGCTGCTTTTTGCAA
 TTATAAAAATGCCAGCAGTTCTGACATTTTGCCTTCTGATTCTAACTGCAAAGATTGGTTTTTTCAGCAGC
 AGATGCTGTAACAGGACTGAAATGGTAGAAGAGGGAGTACCCAAAGAACATTTAGCCTTATTGGCAGTT
 CCAATGGTTCCTTTGCAGATAACTGCCTCTGATTATCAGCAAATACACTGCAGGTCCCGCCATTAA
 ACACATTTTACAAGCCATGCCCTACAGATTATGCTTGGTTAGAATATGCCCTACTGGTTTGGTGGAC
 TCCTAAAGTAGAACATCAAGGGGGATTCCCTATATATTACTATATCGTAGTCTGCTGAGTTATGCTTTA
 CATCAGGTTACAGTGTACAGCATGTATGTTTCTATAATGGCTTTCAATGCAAAGTTAGTGATCCACTTA
 TTGGAGGAACATACATGACCCTTTTAAATACCGTGTCCAATCTGGGAGGAACTGGCCTTCTACAGTAGC
 TCTTTGGCTTGTAGATCCCTCACAGTAAAAGAGTGTGTAGGAGCATCAAACCAGAATTGTCGAACACCT
 GATGCTGTTGAGCTTTGCAAAAACCTGGGTGGCTCATGTGTTACAGCCCTGGATGGTTATTATGTGGAGT
 CCATTATTTGTGTTTTTATTGGATTTGGTTGGTGGTCTTTCTTGGTCCAAAATTTAAAAAGTTACAGGA
 TGAAGGATCATCTTCGTGAAATGCAAAGGAACAAT

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC204131 protein sequence
 Red=Cloning site Green=Tags(s)

MSPTISHKDSSRQRRPGNF SHSLDMKSGPLPPGGWDDSHLDSAGREGDREALLGDTGTGDFLKAPQSFRA
 ELSSILLLLFLYVLQGIPLGLAGSIPLILQSKNVSYTDQAFFSFVFWPFLKLLWAPLVDVAVYVKNFGRR
 KSWLVPTQYILGLFMIYLSTQVDRLLGNTDDRTDPVIALTVAFFLFEFLAATQDIAVDGWALTMSRENV
 GYASTCNSVQTAGYFLGNVFLALESADF CNKYLRFPQPRGIVTLSDFLFFWGTVFLITTTLVALLKK
 ENEVSVVKEETQGITDITYKLLFAIKMPAVLTFCLLILTAKIGFSAADAVTGLKLVVEGVKPEHLALLAV
 PMVPLQIILPLIISKYTAGPQLNTFYKAMPYRLLLGLEYALLVWWTPKVEHQGGFPIYYYIVVLLSYAL
 HQVTVYSMYVSIMAFNAKVS DPLIGGTYMTLLNTVSNLGGNWPSTVALWLDPLTVKECVGASNQNCRT
 DAVELCKKLGSCVTALDGYVYESIICVFIGFWWFLLGPKFKKLQDEGSSSWKCKRNN

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mk6199_c07.zip

Restriction Sites:

Sgfl-Mlul

Cloning Scheme:



ACCN: NM_004733

ORF Size: 1647 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_004733.4](#)

RefSeq Size: 3811 bp

RefSeq ORF: 1650 bp

Locus ID: 9197

UniProt ID: [O00400](#)

Cytogenetics: 3q25.31

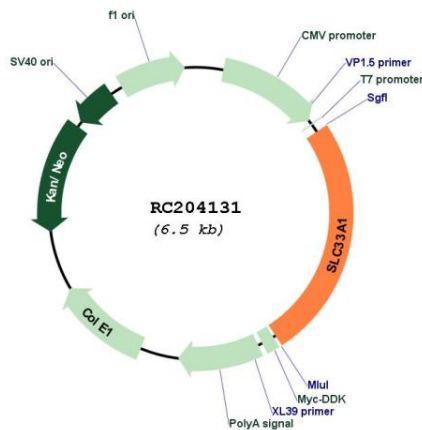
Protein Families: Transmembrane

Protein Pathways: Glycosphingolipid biosynthesis - ganglio series, Metabolic pathways

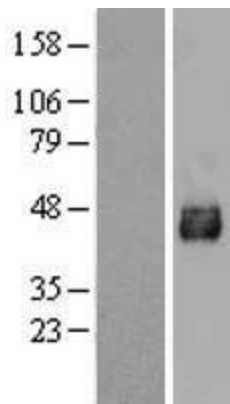
MW: 60.9 kDa

Gene Summary: The protein encoded by this gene is required for the formation of O-acetylated (Ac) gangliosides. The encoded protein is predicted to contain 6 to 10 transmembrane domains, and a leucine zipper motif in transmembrane domain III. Defects in this gene have been reported to cause spastic paraplegia autosomal dominant type 42 (SPG42) in one Chinese family, but not in similar patients of European descent. Two transcript variants encoding the same protein have been found for this gene. [provided by RefSeq, Jul 2010]

Product images:



Circular map for RC204131



Western blot validation of overexpression lysate (Cat# [LY401494]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC204131 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).