

Product datasheet for **RC204487**

SLC1A4 (NM_003038) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	SLC1A4 (NM_003038) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	SLC1A4
Synonyms:	ASCT1; SATT; SPATCCM
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>RC204487 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGGAGAAGACAAACGAGACCAACGGCTACCTTGACAGCGCTCAGCGGGGCTCGCGCCGGCCCGGAG
 CTCGGGGACCGCGCGGACGCGCACGGCGTTGCGCGGGCTTCCTGCGCGCCAAGCGCTGGTGCCTGCT
 CACCGTGTCCGGGTGCTGGCGGCGCGGGCTGGGCGCGGCGTTGCGCGGGCTCAGCCTGAGCCGACG
 CAGGTCACCTACCTGGCCTTCCCGGCGAGATGCTGCTCCGCATGCTGCGCATGATCATCTGCCCTGG
 TGGTCTGACGCTGGTGTGGGCGCCGCTCCCTCGATGCCAGCTGCCTCGGGCGTCTGGGCGGCATCGC
 TGTGCGCTACTTTGGCCTCACCACACTGAGTGCCTCGGCGCTCGCCGTGGCCTTGGCGTTTATCATCAAG
 CCAGGATCCGGTGCAGACCCCTCAGTCCAGCGACCTGGGGCTGGAGGACTCGGGGCTCCTCCTGTCC
 CCAAAGAGACGGTGGACTCTTCTCGACTGGCCAGAACTGTTCCCTCCAATCTTGTGGTTGCAGC
 TTTCCGTACGTATGCAACCGATTATAAAGTCGTGACCCAGAACAGCAGCTCTGGAATGTAAACCATGAA
 AAGATCCCATAGGCACTGAGATAGAAGGGATGAACATTTTAGGATTGGTCTGTTTGTCTGGTGTAG
 GAGTGGCCTTAAAGAACTAGGCTCCGAAGGAGAAGACCTCATCCGTTTCTTCAATTCCTCAACGAGGC
 GACGATGGTGTGGTGTCTGGATTATGTGGTACGTACCTGTGGGCATCATGTTCCCTGTTGGAAGCAAG
 ATCGTGGAAATGAAAGACATCATCGTGTGGTACCGCTGGGAAATACATCTTCGCATCTATATTGG
 GCCATGTTATTCATGGAGGAATTGTTCTGCCACTATTTATTTGTTTTCACACGAAAAACCCATTAG
 ATTCCTCCTGGGCTCCTCGCCCATTTGCGACAGCATTGCTACCTGCTCCAGCTCAGCGACCCCTCCC
 TCTATGATGAAGTGCATTGAAGAGAACAATGGTGTGGACAAGAGGATCAGCAGGTTTATTCTCCCATCG
 GGGCCACCGTGAACATGGACGGAGCAGCCATCTCCAGTGTGTGGCCGCGGTGTTTATTGCGCACTCAA
 CAACGTAGAGCTCAACGCAGGACAGATTTTACCATTCTAGTGAAGTCCACAGCGTCCAGTGTGGAGCA
 GCAGGCGTGCCAGCTGGAGGGTCTCACCATTGCCATTATCCTGGAGGCCATTGGGCTGCCTACTCATG
 ACCTGCCTCTGATCCTGGCTGTGGACTGGATTGTGGACCGGACCACCACGGTGGTGAATGTGGAAGGGGA
 TGCCCTGGGTGCAGGCATTCTCCACCACCTGAATCAGAAGGCAACAAAGAAAGGCGAGCAGGAATTGCT
 GAGGTGAAAGTGAAGCCATCCCAACTGCAAGTCTGAGGAGGAGACATCGCCCTGGTGACACACCAGA
 ACCCCGCTGGCCCGTGGCCAGTCCCCAGAATGGAATCCAAGGAGTCGGTTCTG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC204487 protein sequence
 Red=Cloning site Green=Tags(s)

MEKSNETNGYLDQAQAGPAAGPGAPGTAAGRARRCAGFLRRQALVLLTVSGVLAGAGLGAALRGLSLSRT
 QVTYLAFPGEMLLRMLRMIILPLVVCVSLVSGAASLDASCLGRLGGIAYAVYFGLTTLASALAVAFIHK
 PGSGAQLTQSSDLGLEDSGPPVPKETVDSFLDLARNLFPSNLVVAARFRTYATDYKVVVTQNSSSGNVTHE
 KIPIGTEIEGMNIGLVLFALVLGVALKKLGSEGEDLIRFFNSLNEATMVLVSWIMWYVPGIMFLVGSK
 IIVEMKDIIIVLVTSLGKYIFASILGHVIHGGIVLPLIYFVFRKNPFRLLGLLAPFATAFATCSSSATLP
 SMMKCIENNGVDKRISRFILPIGATVNMGAAIFQVAAVFIAQLNVELNAGQIFITILVTATASSVGA
 AGVPAGGVLTI AILEAIGLPHDLPLILAVDWIVDRTTTTVVNVEGDALGAGILHHLNQAATKKGEQELA
 EVKVEAIPNCKSEEETSPLVTHQNPAGPVASAPELESKESVL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mk6271_e08.zip

Restriction Sites:

SgfI-MluI

Cloning Scheme:



ACCN: NM_003038

ORF Size: 1596 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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_003038.2](#), [NP_003029.2](#)

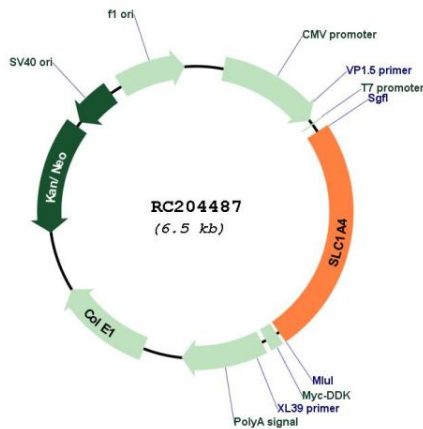
RefSeq Size: 4611 bp

RefSeq ORF: 1599 bp

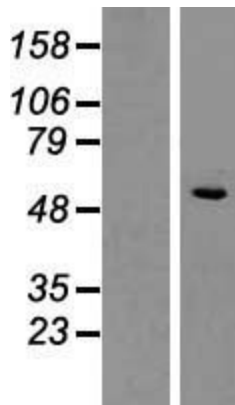
Locus ID: 6509

UniProt ID: [P43007](#)
Cytogenetics: 2p14
Domains: SDF
Protein Families: Druggable Genome, Transmembrane
MW: 55.7 kDa
Gene Summary: The protein encoded by this gene is a sodium-dependent neutral amino acid transporter for alanine, serine, cysteine, and threonine. Defects in this gene have been associated with developmental delay, microcephaly, and intellectual disability. [provided by RefSeq, Jan 2017]

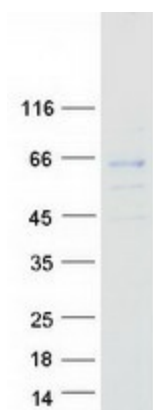
Product images:



Circular map for RC204487



Western blot validation of overexpression lysate (Cat# [LY418935]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC204487 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified SLC1A4 protein (Cat# [TP304487]). The protein was produced from HEK293T cells transfected with SLC1A4 cDNA clone (Cat# RC204487) using MegaTran 2.0 (Cat# [TT210002]).