

Product datasheet for **RC205049**

SLC3A1 (NM_000341) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	SLC3A1 (NM_000341) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	SLC3A1
Synonyms:	ATR1; CSNU1; D2H; NBAT; RBAT
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

ORF Nucleotide
Sequence:

>RC205049 representing NM_000341
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCCGGATCGCC

ATGGCTGAAGATAAAAGCAAGAGAGACTCCATCGAGATGAGTATGAAGGGATGCCAGACAAACAACGGT
TTGTCCATAATGAAGACATTCTGGAGCAGACCCGGATCCAGGCAGCTCAACAGACAACCTGAAGCACAG
CACCAGGGGCATCCTTGCTCCCAGGAGCCGACTTCAAGGGCGTCCAGCCCTATCGGGGATGCCCAAG
GAGGTGCTGTTCCAGTCTCTGGCCAGGCCGCTACCGCATACCTCGGGAGATCCTCTTCTGGCTCACAG
TGGCTTCTGTGCTGGTGTCTATCGCGGCCACCATAGCCATCATTGCCCTCTCTCCAAAGTGCCTAGACTG
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GATCTGAAAGGTATTCAAGATAAACTGGACTACATCACAGCTTTAAATATAAAAAGTGTGGATTACTT
CATTTTATAAATCGTCCCTTAAAGATTTTCAGATATGGTGTGAAGATTTCCGGGAAGTTGATCCCATTTT
TGAACGATGGAAGATTTTGAAGATCTGGTTCAGCCATACATGATAAAGTTTTAAATTAATCATCGAT
TTCATACCAAACACACGAGTGATAAACATATTTGGTTTTCAATTGAGTCGGACACGGACAGGAAAATATA
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AGCCCGGCAGATACAGGTTCTATGGGACTGAAGCCTATGCAGAGAGATTGACAGGACCGTGTACTA
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GGGAACAGCGTGTATGAGGTTATCACATCCTGGATGGAAAACATGCCAGAAGGAAAATGGCCTAAGTGA
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GTTCAAATGCTGGTTTTTCTGAAGCTAGTAACACCTGGTTACCTACCAATTCAGATTACCACACTGTGAA
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ATCTCCTTCATCGCCAAACAGCTTTCAGAGATAGATGCTTTGTTTCCAATCGAGCATGCTATTCCAGTGT
ACTGAACATACTGTATACCTCGTGT

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC205049 representing NM_000341
 Red=Cloning site Green=Tags(s)

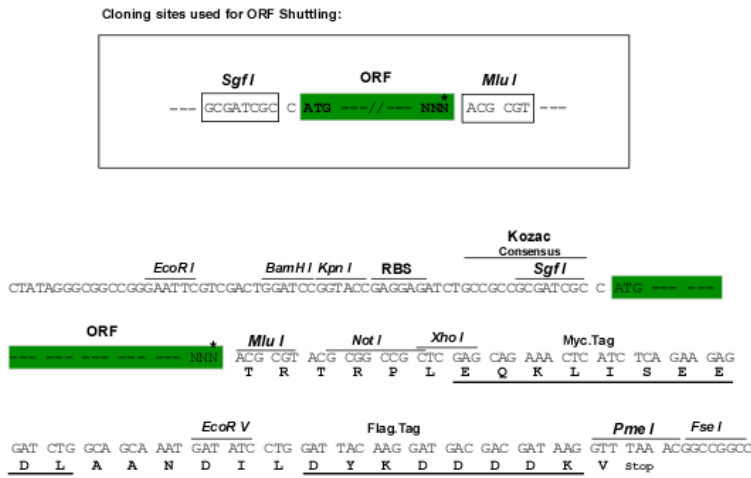
MAEDKSKRDSIEMSMKGCQTNNGFVHNEDILEQTPDPPGSSDNLKHSTRGILGSQEPDFKGVQPYAGMPK
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 DLKGIQDKLDYITALNIKTVWITSFYKSSLKDFRYGVEDFREVDPFIFGTMEDFENLVAAIHDKGLKLIID
 FIPNHTSDKHIWFLSRTRTGKYTDYYIWHDC THENGKTI PPNNWLSVYGNSSWHFDEVRNQC YFHQFMK
 EQPDLNFRNPDVQEEIKEILRFLWTKGVDFSLDAVKFLLEAKHLRDEIQVNKTIQIPDTVTQYSELYHDF
 TTTQVGMHDI VRSFRQTM DQYST EPGRYRFMGTEAYAESIDRTVMYYGLPFIQEADFPFNLYSMLDTVS
 GNSVYEVITSWMENMPEGKWPWNMIGPDSRLTSRLGNQYVNVNMMLLFTLPGTPIYYGEEIGMGNIV
 AANLNESYDINTLRKSPMQWDNSSNAGFSEASNTWLPNTSDYHTVNVVDVQKTQPRSALKLYQDLSLLHA
 NELLNLRGWFCHLRNDSHYVYVYTRLDGIDRIFIVVLNFGESTLLNLHNMISGLPAKIRIRLSTNSADKG
 SKVDTS GIFLDKGEGLIFEHNTKNLLHRQTAFRDRCFVSNRACYSSV LNILYTSC

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mg3235_g09.zip

Restriction Sites: Sgfl-MluI

Cloning Scheme:



* The last codon before the Stop codon of the ORF

ACCN: NM_000341

ORF Size: 2055 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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_000341.2](#), [NP_000332.1](#)

RefSeq Size: 2323 bp

RefSeq ORF: 2058 bp

Locus ID: 6519

UniProt ID: [Q07837](#)

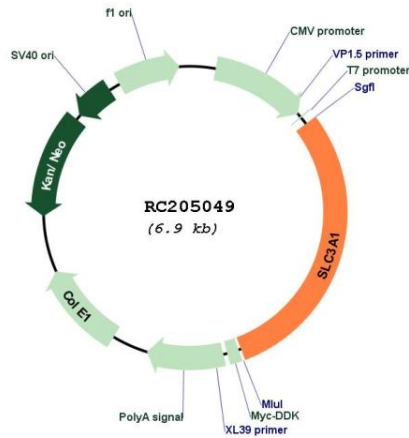
Cytogenetics: 2p21

Protein Families: Druggable Genome, Transmembrane

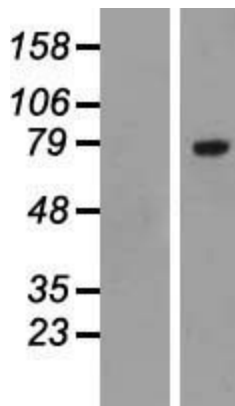
MW: 78.7 kDa

Gene Summary: This gene encodes a type II membrane glycoprotein which is one of the components of the renal amino acid transporter which transports neutral and basic amino acids in the renal tubule and intestinal tract. Mutations and deletions in this gene are associated with cystinuria. Alternatively spliced transcript variants have been described, but their biological validity has not been determined. [provided by RefSeq, Jul 2008]

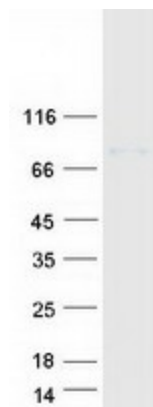
Product images:



Circular map for RC205049



Western blot validation of overexpression lysate (Cat# [LY424785]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC205049 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified SLC3A1 protein (Cat# [TP305049]). The protein was produced from HEK293T cells transfected with SLC3A1 cDNA clone (Cat# RC205049) using MegaTran 2.0 (Cat# [TT210002]).