

Product datasheet for **RC216525**

SLC41A1 (NM_173854) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	SLC41A1 (NM_173854) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	SLC41A1
Synonyms:	MgtE
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>RC216525 representing NM_173854
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGTCCTCTAAGCCAGAGCCGAAGGACGTCCACCAACTGAACGGGACTGGCCCTTCTGCCTCTCCCTGCT
 CTTGAGATGGCCAGGGAGAGAGCCCTTGCTGGGACCTCAGAGTTCTGGGGCTGATGGGGCTGGGT
 AGAGGTGGTGATTGAGTCTCGGGCCAACGCCAAGGGGTTCTGGGAGGAGGACGCCCTGCTGGAGAACGGG
 AGCCAGAGCAACGAAAGTGACGACGTGACGACAGACCGTGGCCCTGCGCCACCTTCCCGCTCAAGGAGA
 CCTCCTTTTCCATCGGGCTGCAAGTACTGTTTCCATTCTCTGCGAGGCTTTGGGACCGTGGTGCTGG
 CATGGTGTGGACATCGTGCAGCACTGGGAAGTCTTCCAGAAGGTGACAGAGGTCTTCATCTAGTGCT
 GCGCTGCTGGGGCTCAAAGGGAACCTGGAATGACCTGGCATCAAGGCTTCCACTGCAGCCAACATTG
 GACACATGGACACACCAAGGAGCTCTGGCGGATGATCACTGGGAACATGGCCCTCATCCAGGTGCAGGC
 CACGGTGGTGGGCTTCTGGCGTCCATCGCAGCCGTCGTCTTTGGCTGGATCCCTGATGGCCACTTCAGT
 ATTCGCGACGCCCTTCTGCTCTGTGCTAGCAGCGTGGCCACAGCCTTCATTGCCTCCCTGGTACTGGGTA
 TGATCATGATTGGAGTCATCATTGGCTCTCGCAAGATTGGGATCAACCCAGACAACGTGGCCACACCCAT
 TGCTGCCAGCCTGGGCGACCTCATCACCTTGGCGCTGCTCTCAGGCATCAGCTGGGGACTCTACCTGGAA
 CTGAATCACTGGCGATACATCTACCCACTGGTGTGTGCTTTCTTTGTGGCCCTGCTGCCTGTCTGGGTGG
 TGCTGGCCCGACGAAGTCCAGCCACAAGGGAGGTGTGTACTCGGGCTGGGAGCCTGTTATCATTGCCAT
 GGCCATCAGCAGTGTGGGAGGCTCATCTTGGACAAGACTGTCTCAGACCCCACTTTGCTGGGATGGCT
 GTCTTCACGCCTGTGATTAATGGTGTGGGGGCAATCTGGTGGCAGTGCAGGCCAGCCGATCTCCACCT
 TCCTGCACATGAATGGAATGCCCGGAGAGAACTCTGAGCAAGCTCCTCGCCGCTGCCAGTCTTGTATC
 CACCTTCTCAGCCCTGATGTGAATCTCGCTCAGCCCGGGTCTCTCTCCTCGTGGTCCCAGGACAC
 CTGGTGTCTCTACACCATCAGCTGTATGCAGGGCGGGCACACCACCTCACACTCATCTTCATCATCT
 TCTATATGACAGCTGCACTGCTCCAGGTGCTGATTCTCTGTACATCGCAGACTGGATGGTGCACCTGGAT
 GTGGGGCCGGGCTGGACCCGGAACCTCTCCATCCATACTTGAAGTCTCTGGGGGACCTGCTTGGC
 ACTGGGCTCTAGCACTCAGCTTCCATGTTCTCTGGCTCATAGGGGACCGAGACAGGATGTCGGGGAC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC216525 representing NM_173854
 Red=Cloning site Green=Tags(s)

MSSKPEPKDVHQLNGTGPSASPCSSDGPGRPLAGTSEFLGPDGAGVEVIESRANAKGVREEDALLENG
 SQSNESDDVSTDRGPAPPSPLKETSFSIGLQVLPFLLAGFGTVAAGMVLDIVQHWVEVFQKVTEVFILVP
 ALLGLKGNLEMTLASRLSTAANIGHMDTPKELWRMITGNMALIQVQATVVGFLASIAAVVFGWIPDGHFS
 IPHAFLLCASSVATAFIASLVLMIGMIGVIGSRKIGINPDNVATPIAASLDLITLALLSGISWGLYLE
 LNHWRYYIPLVCAFFVALLPVWVVLARRSPATREVLVSGWEPVIIAMAISSVGLILDKTVSDPNFAGMA
 VFTPVINGVGNLVAVQASRISTFLHMNGMPGENSEQAPRRCPSPCTTFSPDVNSRSARVFLLVVPGH
 LVFLYTISCMQGGHTTLTLIFIIFYMTAALLQVLILLYIADWMVHMMWGRGLDPDNFSIPYLTALGDLLG
 TGLLALS FHLWLIGDRD TDVG D

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/ja1490_d08.zip

Restriction Sites:

SgfI-MluI

Cloning Scheme:


ACCN: NM_173854

ORF Size: 1539 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_173854.6](#)

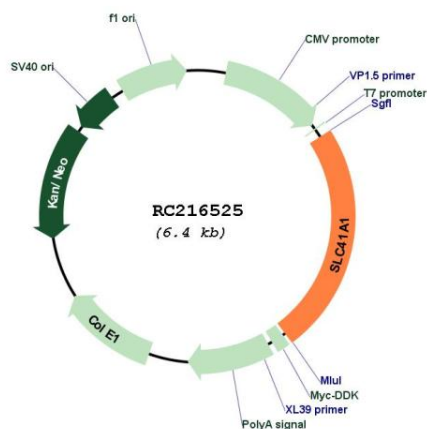
RefSeq Size: 4869 bp

RefSeq ORF: 1542 bp

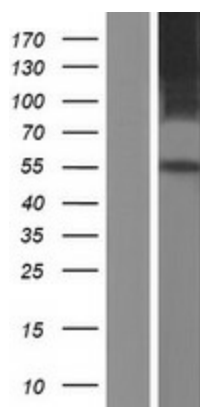
Locus ID: 254428

UniProt ID:	<u>Q8IVJ1</u>
Cytogenetics:	1q32.1
Protein Families:	Transmembrane
MW:	54.7 kDa
Gene Summary:	Acts as a magnesium transporter that is responsive to magnesium balance.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for RC216525



Western blot validation of overexpression lysate (Cat# [LY406323]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC216525 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).