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Product datasheet for RC225834

SLC7A9 (NM_001126335) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Tag:	Myc-DDK
Symbol:	SLC7A9
Synonyms:	BAT1; CSNU3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>RC225834 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGGGGATACTGGCCTGAGAAAGCGGAGAGAGGATGAGAAGTCGATCCAGAGCCAAGAGCCTAAGACCA
CCAGTCTCCAAAAGGAGCTGGGCCTCATCAGTGGCATCTCCATCATCGTGGGCACCATCATTGGCTCTGG
GATCTTCGTTTCCCCCAAGTCTGTGCTCAGCAACACGGAAGCTGTGGGGCCCTGCCTCATCATATGGGCG
GCTTGCGGGGTCCTCGCGACGCTGGGTGCCCTGTGCTTTGCGGAGCTTGGCACAATGATCACCAAGTCAG
GGGGAGAGTATCCCTACCTGATGGAGGCCTACGGGCCCATCCCCGCCTACCTCTTCTCCTGGGCCAGCCT
GATCGTCATTAAGCCCACGTCCTTCGCCATCATCTGCCTCAGCTTCTCCGAGTATGTGTGTGCGCCCTTC
TATGTGGGCTGCAAGCCTCCTCAAATCGTTGTGAAATGCCTGGCCGCCGCCGCCATCTTGTTCATCTCGA
CAGTGAACTCACTGAGCGTGCGGCTGGGAAGCTACGTCCAGAACATCTTCACCGCGGCCAAGCTGGTGAT
CGTGGCCATCATCATCATCAGCGGGCTGGTGCTCCTGGCCCAAGGAAACACAAAGAATTTTGATAATTCT
TTCGAGGGCGCCCAGCTGTCTGTGGGAGCCATCAGCCTGGCGTTTTACAATGGACTCTGGGCCTATGATG
GATGGAATCAACTCAATTACATCACAGAAGAACTTAGAAACCCTTACAGAAACCTGCCTTTGGCCATTAT
CATCGGGATCCCCCTGGTGACGGCGTGCTACATCCTCATGAACGTGTCCTACTTCACCGTGATGACTGCC
ACCGAACTCCTGCAGTCCCAGGCGGTGGCTGTGACATTTGGTGACCGTGTTCTCTATCCTGCTTCTTGGA
TCGTTCCACTTTTTGTGGCATTTTCAACCATCGGTGCTGCTAACGGGACCTGCTTCACAGCGGGCAGACT
CATTTACGTGGCGGGCCGGGAGGGTCACATGCTCAAAGTGCTTTCTTACATCAGCGTCAGGCGCCTCACT
CCAGCCCCCGCCATCATCTTTTATGGTATCATAGCAACGATTTATATCATCCCTGGTGACATAAACTCGT
TAGTCAATTATTTCAGCTTTGCCGCATGGCTGTTTTATGGCCTGACGATTCTAGGACTCATCGTGATGAG
ATTTACAAGGAAAGAGCTGGAAAGGCCTATCAAGGTGCCCGTAGTCATTCCCGTCTTGATGACACTCATC
TCTGTGTTTTTGGTTCTGGCTCCAATCATCAGCAAGCCCACCTGGGAGTACCTCTACTGTGTGCTGTTTA
TATTAAGCGGCCTTTTATTTTACTTCCTGTTTGTCCACTACAAGTTTGGATGGGCTCAGAAAATCTCAAA
GCCGATTACCATGCACCTTCAGATGCTAATGGAAGTGGTCCCACCGGAGGAAGACCCTGAG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC225834 protein sequence
Red=Cloning site Green=Tags(s)

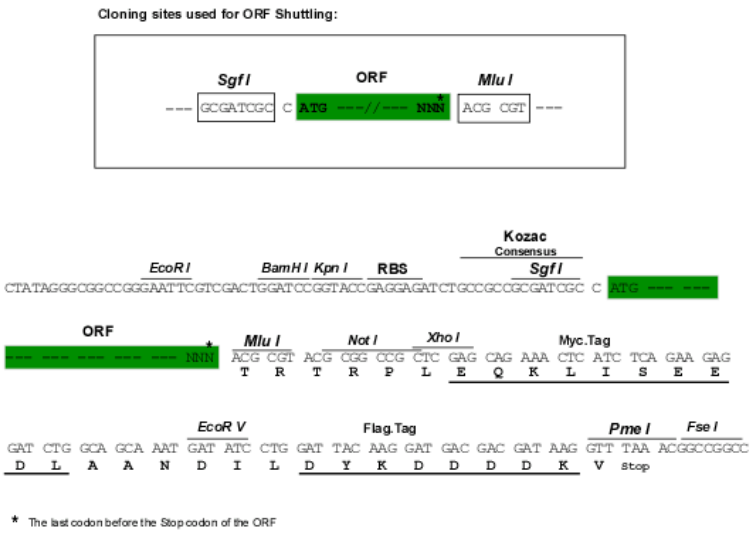
MGDTGLRKRREDEKSIQSQEPKTTSLQKELGLISGISIIVGTIIGSGIFVSPKSVLSNTEAVGPCLIIWA
ACGVLATLGALCFAELGTMITKSGGEYPYLMEAYGPIPAYLFSWASLIVIKPTSFAIICLSFSEYVCAPF
YVGCKPPQIVVKCLAAAAILFISTVNSLSVRLGSYVQNIFTAAKLVIVAIIIISGLVLLAQGNTKNFDNS
FEGAQLSVGAISLAFYNGLWAYDGWNQLNYITEELRNPYRNLPLAIIIGIPLVTACYILMNVSYFTVMTA
TELLQSQAVAVTFGDRVLYPASWIVPLFVAFSTIGAANGTCFTAGRLIYVAGREGHMLKVLSYISVRRLT
PAPAIIFYGIIATIYIIPGDINSLVNYFSFAAWLFYGLTILGLIVMRFTRKELERPIKVPVVIPVLMTLI
SVFLVLAPIISKPTWEYLYCVLFILSGLLFYFLFVHYKFGWAQKISKPITMHLQMLMEVVPPEEDPE

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6439_h11.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001126335

ORF Size: 1461 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.

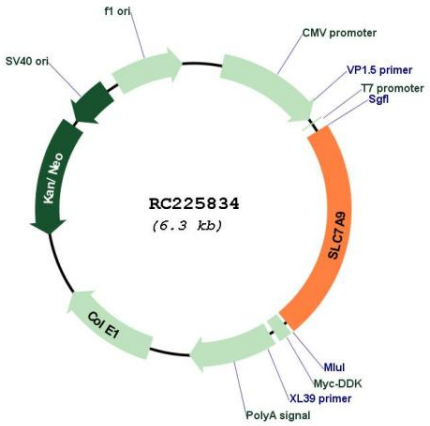
Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: NM_001126335.2

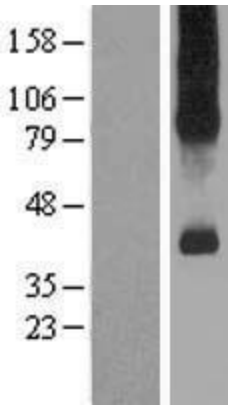
RefSeq Size: 1703 bp

RefSeq ORF:	1464 bp
Locus ID:	11136
UniProt ID:	P82251
Cytogenetics:	19q13.11
Protein Families:	Druggable Genome, Transmembrane
MW:	53.5 kDa
Gene Summary:	This gene encodes a protein that belongs to a family of light subunits of amino acid transporters. This protein plays a role in the high-affinity and sodium-independent transport of cystine and neutral and dibasic amino acids, and appears to function in the reabsorption of cystine in the kidney tubule. Mutations in this gene cause non-type I cystinuria, a disease that leads to cystine stones in the urinary system due to impaired transport of cystine and dibasic amino acids. Alternate transcript variants, which encode the same protein, have been found for this gene. [provided by RefSeq, Jul 2011]

Product images:



Circular map for RC225834



Western blot validation of overexpression lysate (Cat# [LY426676]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC225834 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).