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Product datasheet for RC210214

SLC7A2 (NM_001008539) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	SLC7A2 (NM_001008539) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	SLC7A2
Synonyms:	ATRC2; CAT2; HCAT2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

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ORF Nucleotide Sequence:

>RC210214 representing NM_001008539
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGATTCCTTGCAGAGCCGCGCTGACCTTTGCCCGATGTCTGATCCGGAGAAAAATCGTGACCCTGGACA
GTCTAGAAGACACCAAATTATGCCGCTGCTTATCCACCATGGACCTCATTGCCCTGGGCGTTGGAAGCAC
CCTTGGGGCCGGGGTTTATGTCCTCGCTGGGGAGGTGGCCAAGGCAGACTCGGGCCCCAGCATCGTGGTG
TCCTTCCTCATTGCTGCCCTGGCTTCAGTGATGGCTGGCCTCTGCTATGCCGAATTTGGGGCCCGTGTTC
CCAAGACGGGGTCTGCATATTTGTACACCTACGTGACTGTCGGAGAGCTGTGGGCCTTCATCACTGGCTG
GAATCTCATTTTATCGTATGTGATAGGTACATCAAGTGTTGCAAGAGCCTGGAGTGGCACCTTTGATGAA
CTTCTTAGCAAACAGATTGGTCAGTTTTTGAGGACATACTTCAGAATGAATTACACTGGTCTTGCAGAAT
ATCCCGATTTTTTTGCTGTGTGCCTTATATTACTTCTAGCAGGTCTTTTGTCTTTTGGAGTAAAAGAGTC
TGCTTGGGTGAATAAAGTCTTCACAGCTGTTAATATTCTCGTCCTTCTGTTTGTGATGGTTGCTGGGTTT
GTGAAAGGAAATGTGGCAAACTGGAAGATTAGTGAAGAGTTTCTCAAAAATATATCAGCAAGTGCCAGAG
AGCCACCTTCTGAAAACGGAACAAGTATCTATGGGGCTGGTGGCTTTATGCCTTATGGCTTTACGGGAAC
GTTGGCTGGTGCTGCAACTTGCTTTTATGCCTTTGTGGGATTTGACTGCATTGCAACAACTGGTGAAGAA
GTTCGGAATCCCCAGAAAGCTATTCCCATTGGAATTGTGACGTCTTTGCTTGTTTGCTTTATGGCCTATT
TTGGGGTCTCTGCAGCTTTAACACTTATGATGCCGTACTACCTCCTCGATGAAAAAAGCCCCCTTCCTGT
AGCGTTTGAATATGTGGGATGGGGTCCTGCCAAATATGTCGTCGCAGCTGGTTCTCTCTGCGCCTTGTCA
ACAAGTCTTCTTGGATCCATTTTCCCAATGCCTCGTGTAATCTATGCTATGGCGGAGGATGGGTTGCTTT
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GCCTACTCTCTGGTGGCAGCCTGTGTTCTCATCCTCAGGTACCAGCCTGGCTTATCTTACGACCAGCCCA
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CATGCTGCAGAGACAGGGCTTCAGCATGCGGACCCTCTTCTGCCCCTCCCTTCTGCCAACACAGCAGTCA
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TTACCATTTTTGCCAGCGTTCAGCATCTTGGTGAACATTTACTTGATGGTCCAGTTAAGTGCAGACACTT
GGGTCAGATTCAGCATTTGGATGGCAATTGGCTTCCTGATTTACTTTTCTTATGGCATTAGACACAGCCT
GGAGGGTCATCTGAGAGATGAAAACAATGAAGAAGATGCTTATCCAGACAACGTTCATGCAGCAGCAGAA
GAAAAATCTGCCATTCAAGCAAATGACCATCACCCAAGAAATCTCAGTTCACCTTTCATATTCCATGAAA
AGACAAGTGAATTC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

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Protein Sequence:

>RC210214 representing NM_001008539
Red=Cloning site Green=Tags(s)

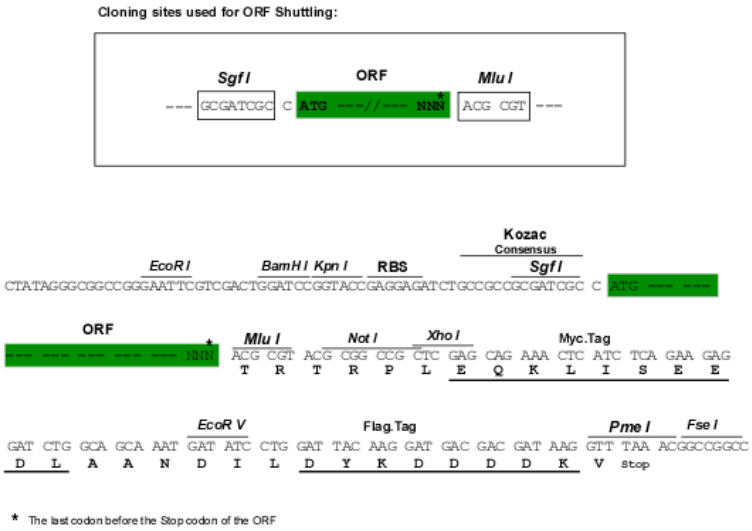
MIPCRAALTFARCLIRRKIVTLDSLEDTKLCRCLSTMDLIALGVGSTLGAGVYVLAGEVAKADSGPSIVV
SFLIAALASVMAGLCYAEFGARVPKTGSAYLYTYVTVGELWAFITGWNLILSYVIGTSSVARAWSGTFDE
LLSKQIGQFLRTYFRMNYTGLAEYPDFFAVCLILLLAGLLSFGVKESAWVNKVFTAVNILVLLFVMVAGF
VKGNVANWKISEEFLKNISASAREPPSENGTSIYGAGGFMPYGFTGTLAGAATCFYAFVGFDCIATTGEE
VRNPQKAIPIGIVTSLLVCFMAYFGVSAALTLMMPYYLLDEKSPLPVAFEYVGWGPAKYVVAAGSLCALS
TSLLGSIFPMPRVIYAMAEDGLLFKCLAQINSKTKTPIIATLSSGAVAALMAFLFDLKALVDMMSIGTLM
AYSLVAACVLILRYQPGLSYDQPKCSPEKDGLGSSPRVTSKSESQVTMLQRQGFSMRTLFCPSLLPTQQS
ASLVSFLVGFLAFLVLGLSVLTTYGVHAITRLEAWSLALLALFLVLFVAIVLTIWRQPQNQQKVAFMVPF
LPFLPAFSILVNIYLMVQLSADTWVRFSIWMAIGFLIYFSYGIRHSLEGHLRDENNEEDAYPDNVHAAAE
EKSAIQANDHHPRNLSSPFIFHEKTSEF

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mg4262_h05.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001008539

ORF Size: 1974 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).

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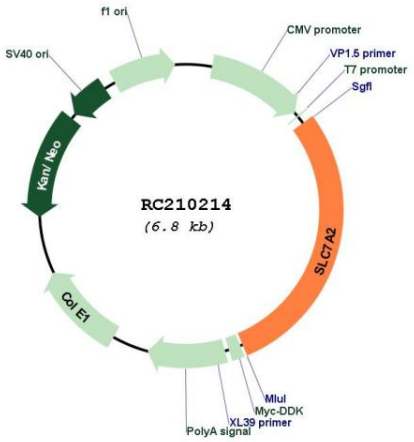
Reconstitution Method:	1. Centrifuge at 5,000xg for 5min. 2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA. 3. Close the tube and incubate for 10 minutes at room temperature. 4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid 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_001008539.4
RefSeq Size:	7389 bp
RefSeq ORF:	1977 bp
Locus ID:	6542
UniProt ID:	P52569
Cytogenetics:	8p22
Protein Families:	Druggable Genome, Transmembrane
MW:	71.5 kDa
Gene Summary:	The protein encoded by this gene is a cationic amino acid transporter and a member of the APC (amino acid-polyamine-organocation) family of transporters. The encoded membrane protein is responsible for the cellular uptake of arginine, lysine and ornithine. Three transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Oct 2011]

Product images:



Circular map for RC210214

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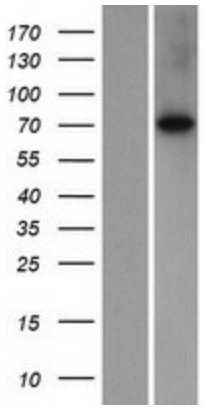
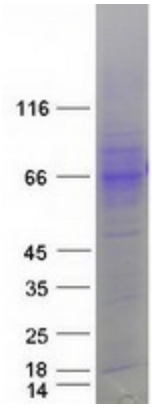


Western blot validation of overexpression lysate (Cat# [LY422792]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC210214 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified SLC7A2 protein (Cat# [TP310214]). The protein was produced from HEK293T cells transfected with SLC7A2 cDNA clone (Cat# RC210214) using MegaTran 2.0 (Cat# [TT210002]).

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