

## Product datasheet for **RC228543**

### SLC7A2 (NM\_001164771) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	SLC7A2 (NM_001164771) 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:

>RC228543 representing NM\_001164771  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGCATCGCC**

ATGAAGATAGAAACAAGTGGTTATAACTCAGACAACTAATTTGTCGAGGTTTATTGGAACACCTGCC  
 CACCGTTTTGCGACAGCAAGTTTCTCCTGTCGCCTTCGTGACAGCTCAGAATGATTCCTTGACAGCCGC  
 GCTGACCTTTGCCGATGTCTGATCCGGAGAAAAATCGTGACCCTGGACAGTCTAGAAGACCAAAATTA  
 TGCCGCTGCTTATCCACCATGGACCTCATTGCCCTGGGCGTTGGAAGCACCCCTGGGGCCGGGTTTATG  
 TCCTCGTGGGGAGGTGGCAAGGCAGACTCGGGCCCCAGCATCGTGGTGTCTTCTCATTGCTGCCCT  
 GGCTTCAGTGATGGCTGGCCTCTGCTATGCCGAATTTGGGGCCCGTGTCCCAAGACGGGTCTGCATAT  
 TTGTACACCTACGTGACTGTGGAGAGCTGTGGCCTTCATCACTGGCTGGAATCTCATTTTATCGTATG  
 TGATAGGTACATCAAGTGTGCAAGAGCCTGGAGTGGCACCTTTGATGAACCTCTTAGCAAACAGATTGG  
 TCAGTTTTTGAGGACATACTTCAGAATGAATTACTGGTCTTGCAAGAATATCCCGATTTTTTGTCTGTG  
 TGCCCTATATTACTTCTAGCAGGCTTTTTGTCTTTGGAGTAAAAGAGTCTGCTTGGGTGAATAAAGTCT  
 TCACAGCTGTTAATATTCTCGTCCTTCTGTTTGTGATGGTTGCTGGGTTTGTGAAAGGAAATGTGGCAAA  
 CTGGAAGATTAGTGAAGAGTTTCTCAAAAATATATCAGCAAGTCCAGAGAGCCACCTTCTGAAAACGGA  
 ACAAGTATCTATGGGGCTGGTGGCTTTATGCCTTATGGCTTTACGGGAACGTTGGCTGGTGTGCAACTT  
 GCTTTTATGCCTTTGTGGGATTTGACTGCATTGCAACAACCTGGTGAAGAAGTTCGGAATCCCCAGAAAGC  
 TATCCCATTTGGAATTGTGACGCTTTGCTTGTGTTGCTTATGGCCTATTTGGGGTCTCTGCAGCTTTA  
 ACATTTATGATGCCGACTACCTCCTCGATGAAAAAGCCCCCTCCTGTAGCGTTTGAATATGTGGGAT  
 GGGCTCTGCCAAATATGTCGTCGAGCTGGTTCTCTGCGCCTGTCAACAAGTCTTCTGGATCCAT  
 TTTCCCAATGCCTCGTGAATCTATGCTATGGCGGAGGATGGGTTGCTTTTCAAATGTCTAGCTCAAATC  
 AATTCCAAAACGAAGACACCAATAATTGCTACTTTATCATCGGGTGCAGTGGCAGCTTTGATGGCCTTTC  
 TGTGTTGACCTGAAGGCGCTTGTGGACATGATGTCCATTGGCACACTCATGGCCTACTCTCTGGTGGCAGC  
 CTGTGTTCTCATCCTCAGGTACCAGCCTGGCTTATCTTACGACCAGCCAAATGTTCTCCTGAGAAAAGAT  
 GGTCTGGGATCGTCTCCAGGGTAACCTCGAAGAGTGAGTCCAGGTACCATGCTGCAGAGACAGGGCT  
 TCAGCATGCGGACCCTTCTGCCCTCCCTTCTGCCAACACAGCAGTCACTTCTCTCGTGAGCTTTCT  
 GGTAGGATTCCTAGCTTTCCTCGTGTGGGCTGAGTGTCTTGACCACTACGGAGTTCATGCCATCACC  
 AGGCTGGAGGCCCTGGAGCCTCGCTCTCCTCGCGCTGTTTCTTGTCTCTTCGTTGCCATCGTTCTACCA  
 TCTGGAGGCAGCCCAAGATCAGCAAAAAGTAGCCTTCATGGTTCCATTCTTACCATTTTTGCCAGCGTT  
 CAGCATCTTGGTGAACATTTACTTGATGGTCCAGTTAAGTGCAGACACTGGGTCAGATTAGCATTGG  
 ATGGCAATTGGCTTCTGATTTACTTTTCTTATGGCATTAGACACAGCCTGGAGGGTCACTGAGAGATG  
 AAAACAATGAAGAAGATGCTTATCCAGACAACGTTTCATGCAGCAGCAGAAGAAAAATCTGCCATTCAAGC  
 AAATGACCATCACCAAGAAATCTCAGTTCACCTTTCATATTCCATGAAAAGACAAGTGAATTC

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >RC228543 representing NM\_001164771  
 Red=Cloning site Green=Tags(s)

MKIETSGYNSDKLICRGFIGTPAPPVCDKFLSPSSDVRMIPCRAALTFARCLIRRKIVTLDLSLEDTKL  
 CRCLSTMDLIALGVGSTLGAGVYVLAGEVAKADSGPSIVVSFLIAALASVMAGLCYAEFGARVPKGTGSAY  
 LYTYVTVGELWAFITGWNLILSVYIGTSSVARAWSGTFDELLSKQIGQFLRTYFRMNYTGLAEYPDFFAV  
 CLILLLAGLLSFGVKESAWVNKVF TAVNILVLLFVMVAGFVKGNVANWKISEEF LKNISASAREPPSENG  
 TSIYGAGGFMPYGF TGLAGAATCFYAFVGFDCIATTGEEVRNPQKAIP IGI VTSLLVCFMAYFGVSAAL  
 TLMPPYLLDEKSPLPVAFEYVWGPAKYVVAAGSLCALSTSLGSI FPMPRVIYAMAEDGLL FKCLAQI  
 NSKT K TPIIATLSSGAVAALMAFLFDL KALVDMMSIGTLMAYSLVAACVLILRYQPGLSYDQPKCSPEKD  
 GLGSSPRVTSKSESQVTMLQRQGF SMRTLFCPSLLPTQQSASLVSFLVGF LAFLVLGLSVL TTYGVHAIT  
 RLEAWSLALLALFLVFAIVLTIWRQPQNQQVAFMVPFLPFLPAFSILVNIYLMVQLSADTWVRF SIW  
 MAIGFLIYFSYGI RSHLEGHLR DENNEEDAYPDNVHAAAEEKSAIQANDHHP RNLSPPFI FHEKTSEF

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk8007\\_b01.zip](https://cdn.origene.com/chromatograms/mk8007_b01.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



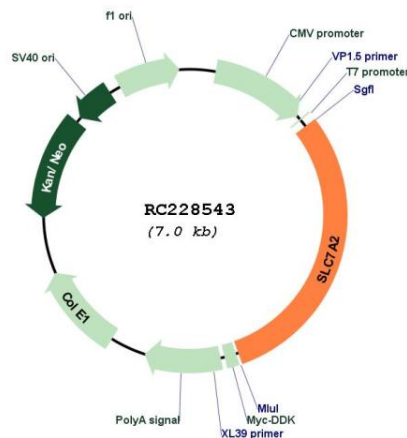
**ACCN:** NM\_001164771

**ORF Size:** 2094 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.

<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"> <li>1. Centrifuge at 5,000xg for 5min.</li> <li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li> <li>3. Close the tube and incubate for 10 minutes at room temperature.</li> <li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li> <li>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.</li> </ol>
<b>RefSeq:</b>	<u><a href="#">NM_001164771.2</a></u>
<b>RefSeq ORF:</b>	2097 bp
<b>Locus ID:</b>	6542
<b>UniProt ID:</b>	<u><a href="#">P52569</a></u>
<b>Cytogenetics:</b>	8p22
<b>Protein Families:</b>	Druggable Genome, Transmembrane
<b>MW:</b>	75.8 kDa
<b>Gene Summary:</b>	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 RC228543