

Product datasheet for **RC219733**

NRAMP1 (SLC11A1) (NM_000578) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	NRAMP1 (SLC11A1) (NM_000578) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	NRAMP1
Synonyms:	LSH; NRAMP; NRAMP1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>RC219733 representing NM_000578
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**GCGATCGCC**

ATGACAGGTGACAAGGGTCCCCAAGGCTAAGCGGGTCCAGCTATGGTTCCATCTCCAGCCCGACCAGCC
 CGACCAGCCAGGGCCACGGCAAGCACCTCCAGAGAGACCTACCTGAGTGAGAAGATCCCCATCCAGAG
 CAAAAACCGGGCACCTTCAGCCTGCGGAAGCTATGGGCCTTACGGGGCTGGCTTCTCATGAGCATT
 GCTTCTCTGGACCCAGGAAACATCGAGTCAGATCTTCAGGCTGGCGCCGTGGCGGGATTCAAACCTCTCT
 GGGTGCTGCTCTGGGCCACCGTGTGGGCTTGGCTCTGCCAGCGACTGGCTGCACGTCTGGCGTGGTGAC
 AGGCAAGGACTTGGGCGAGGTCTGCCATCTCTACTACCTAAGGTGCCCCGACCCTCTCTGGCTGACC
 ATCGAGCTAGCCATTGTGGGCTCCGACATGCAGGAAGTCATCGGCACGGCCATTGCATCAATCTGCTCT
 CAGCTGGACGAATCCCACTCTGGGGTGGCGTCTCATCACCATCGTGGACACCTTCTTCTCTCTCTCT
 CGATAACTACGGGCTGCGGAAGCTGGAAGCTTTTTTTGGACTCCTATAACCATTATGGCCTTGACCTTT
 GGCATAGAGTATGTGGTGGCGCTCCTGAGCAGGGAGCGCTTCTCGGGGCTGTTCTGCCCTCGTGCC
 CGGGCTGCGGCCACCCGAGCTGCTGCAGGCGGTGGGCATTGTTGGCGCCATCATCATGCCCCAACAT
 CTACCTGCACTCGGCCCTGGTCAAGTCTCGAGAGATAGACCGGGCCCGCCGAGCGGACATCAGAGAAGCC
 AACATGTACTTCTGATTGAGGCCACCATCGCCCTGTCCGTCTCCTTTATCATCAACCTCTTTGTATCG
 CTGTCTTTGGGACGGCCTTCTACCAGAAAACCAACCAGGCTGCGTTCAACATCTGTGCCAACAGCAGCCT
 CCACGACTACGCCAAGATCTTCCCCATGAACAACGCCACCGTGGCCGTGGACATTTACCAGGGGGCGTG
 ATCTGGGCTGCCTGTTGGCCCCGCGGCCCTACATCTGGCCATAGGTCTCCTGGCGGCTGGGCAGAG
 GCTCCACCATGACGGGCACCTACGCGGGACAGTTCGTGATGGAGGGCTTCTGAGGCTGCGGTGACG
 CTTGCGCCGTGCTCCTCCTCACCCGCTCCTGCGCCATCCTGCCACCGTGCCTCGTGGCTGTCTTCCGGGAC
 CTGAGGGACTTGTGGGCTCAATGATCTGCTCAACGTGCTGCAGAGCCTGCTGCTCCCGTTGCGCGTGC
 TGCCCATCCTCACGTTACCAGCATGCCACCCTCATGCAGGAGTTTGCCAAATGGCCTGTGAACAAGGT
 CGTCACCTCTTCCATCATGGTGTAGTCTGCGCCATCAACCTCTACTTGTGGTCAAGTATCTGCCAGC
 CTGCCCCACCCTGCCTACTTGGGCTTGCAGCCTTGTGGCCGACGCTACCTGGGCTCAGCACCTACC
 TGGTCTGGACCTGTTGCCTTGCCACGGAGCCACCTTTCTGGCCACAGCTCCACCACCCTTCTGTGA
 TGGGCTCCTTGAAGAGGACCAGAAAGGGGAGACCTCTGGC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC219733 representing NM_000578
 Red=Cloning site Green=Tags(s)

MTGDKGPQRLSGSSYGSISSPTSPTSPGPRQAPPRETYLSEKIPIPDTPKPGTFLRKLWAFWTPGPFMSI
 AFLDPGNIESDLQAGAVAGFKLLWVLLWATVLLCQRLAARLGVVTGKDLGEVCHLYPKVPRVTLWLT
 IELAIVGSDMQEVIQTAIAFNLLSAGRIPLWGGVLIITIVDTFFFLLFDNYGLRKLKLEAFFGLLITIMALTF
 GYEVVVARPEQGALLRGLFLPSCPGCHPELLQAVGIVGAIIMPHNIYLSALVKSREIDRARRADIREA
 NMYFLIEATIALSVSFIINLVMVAFVGFYQKTNQAAFNICANSSLHDYAKIFPMNNATVAVDIYQGGV
 ILGCLFGPAALYIWAIGLLAAGQSSTMTGTAGYQFVMEGFLRLRWSRFARVLLTRSCAILPTVLVAVFRD
 LRDLSGLNDLLNVLQSLLLPFAVLPILTFTSMPTLMQEFANGLLNKVVTSIMVLVCAINLYFVVSYLPS
 LPHPAYFGLAALLAAAYLGLSTYLWVTCCLAHGATFLAHS SHHFLYGLLEEDQKGETSG

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mk8001_b01.zip

Restriction Sites:

Sgfl-Mlul

Cloning Scheme:

ACCN: NM_000578

ORF Size: 1650 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).

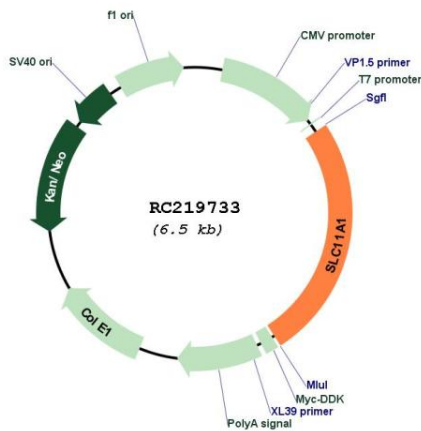
- Reconstitution Method:**
1. Centrifuge at 5,000xg for 5min.
 2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
 3. Close the tube and incubate for 10 minutes at room temperature.
 4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the 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_000578.2](#), [NP_000569.2](#)

RefSeq Size: 2573 bp
 RefSeq ORF: 1653 bp
 Locus ID: 6556
 UniProt ID: [P49279](#)
 Cytogenetics: 2q35
 Domains: Nramp
 Protein Families: Transmembrane
 Protein Pathways: Lysosome
 MW: 59.7 kDa

Gene Summary: This gene is a member of the solute carrier family 11 (proton-coupled divalent metal ion transporters) family and encodes a multi-pass membrane protein. The protein functions as a divalent transition metal (iron and manganese) transporter involved in iron metabolism and host resistance to certain pathogens. Mutations in this gene have been associated with susceptibility to infectious diseases such as tuberculosis and leprosy, and inflammatory diseases such as rheumatoid arthritis and Crohn disease. Alternatively spliced variants that encode different protein isoforms have been described but the full-length nature of only one has been determined. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RC219733