

Product datasheet for **RG219733**

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:	TurboGFP
Symbol:	NRAMP1
Synonyms:	LSH; NRAMP; NRAMP1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>RG219733 representing NM_000578
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGACAGGTGACAAGGGTCCCCAAGGCTAAGCGGGTCCAGCTATGGTTCATCTCCAGCCCGACCAGCC
 CGACCAGCCAGGGCCACGGCAAGCACCTCCAGAGAGACCTACCTGAGTGAGAAGATCCCATCCAGAG
 CAAAAACCGGGCACCTTCAGCCTGCGGAAGCTATGGGCCTTACGCGGGCCTGGCTTCTCATGAGCATT
 GCTTCTCTGGACCCAGGAAACATCGAGTCAGATCTTCAGGCTGGCGCCGTGGCGGGATTCAAACCTCTCT
 GGGTGCTGCTCTGGGCCACCGTGTGGGCTTGGCTCTGCCAGGACTGGCTGCACGTCTGGCGTGGTGAC
 AGGCAAGGACTTGGGCGAGGTCTGCCATCTCTACTACCTAAGGTGCCCGCACCGTCTCTGGCTGACC
 ATCGAGCTAGCCATTGTGGGCTCCGACATGCAGGAAGTCATCGGCACGGCCATTGCATTCAATCTGCTCT
 CAGCTGGACGAATCCCCTCTGGGGTGGCGTCTCATCACCATCGTGGACACCTTCTTCTCTCTCTCT
 CGATAACTACGGGCTGCGGAAGCTGGAAGCTTTTTTTGGACTCCTATAACCATTATGGCCTTGACCTTT
 GGCATAGATATGTTGGTGGCGCTCCTGAGCAGGGAGCGCTTCTCGGGGCTGTTCTGCCTCGCTGCC
 CGGGCTGCGGCCACCCGAGCTGCTGCAGGCGGTGGGCATTGTTGGCGCCATCATCATGCCCCAACAT
 CTACCTGCACTCGGCCCTGGTCAAGTCTCGAGAGATAGACCGGGCCCGCCGAGCGGACATCAGAGAAGCC
 AACATGTACTTCTGATTGAGGCCACCATCGCCCTGTCCGTCTCCTTTATCATCAACCTCTTTGTCATGG
 CTGTCTTTGGGACGGCCTTCTACCAGAAAACCAACCAGGCTGCGTTCAACATCTGTGCCAACAGCAGCCT
 CCACGACTACGCCAAGATCTTCCCATGAACAACGCCACCGTGGCCGTGGACATTTACCAGGGGGCGTG
 ATCTGGGCTGCCTGTTCCGCCCCGCGCCCTACATCTGGCCATAGGTCTCCTGGCGCTGGGCAGAG
 GTCACCATGACGGGCACCTACGCGGGACAGTTCGTGATGGAGGGCTTCTGAGGCTGCGGTGGTCAGC
 CTTGCGCCGTGCTCCTCCTCACCCTCCTGCGCCATCCTGCCACCGTGCCTCGTGGCTGTCTTCCGGGAC
 CTGAGGGACTTGTGGGCTCAATGATCTGCTCAACGTGCTGCAGAGCCTGCTGCTCCCGTTGCGCGTGC
 TGCCATCCTCACGTTACCAGCATGCCACCCTCATGCAGGAGTTTGCCAAATGGCCTGTGAACAAGGT
 CGTCACCTCTTCCATCATGGTGTAGTCTGCGCCATCAACCTCTACTTGTGGTCAAGTATCTGCCAGC
 CTGCCACCCTGCCTACTTCCGCTTGCAGCCTTGTGGCCGACGCTACCTGGGCTCAGCACCTACC
 TGGTCTGGACCTGTTGCCTTGCCACGGAGCCACCTTTCTGGCCACAGCTCCCACCACCACTTCTGTGA
 TGGCTCCTTGAAGAGGACCAGAAAGGGGAGACCTCTGGC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>RG219733 representing NM_000578
 Red=Cloning site Green=Tags(s)

MTGDKGPQRLSGSSYGSISSPTSPTSPGPRQAPPRETYLSEKIPIPDTPKPTFLSRKLEWFTGPGFLMSI
 AFLDPGNIESDLQAGAVAGFKLLWLLWATVLLGLLQRLAARLGVVTGKDLGEVCHLYPKVPRTVLWLT
 IELAIVGSDMQEVIQTAIAFNLLSAGRIPLWGGVLTITIVDTFFFLFDNYGLRKLAEFFGLLITIMALTF
 GYEYVVARPEQGALLRGLFLPSCPGCHPELLQAVGIVGAIIMPHNIYLHSALVKSREIDRARRADIREA
 NMYFLIEATIALSVSFIINLVMVAVFGQAFYQKTNQAAFNICANSSLHDYAKIFPMNNAVVDIYQGGV
 ILGCLFGPAALYIWAIGLLAAGQSSTMTGTAGQFVMEGFLRLRWSRFARVLLTRSCAILPTVLVAVFRD
 LRDLSGLNDLLNVLQSLLLPFAVLPILTFTSMPTLMQEFANGLLNKVVTSIMVLVCAINLYFVVSYLPS
 LPHPAYFGLAALLAAAYLGLSTYLWVTCCLAHGATFLAHS SHHFLYGLLEEDQKGETSG

TRTRPLE - GFP Tag - V

Restriction Sites:

Sgfl-MluI

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.

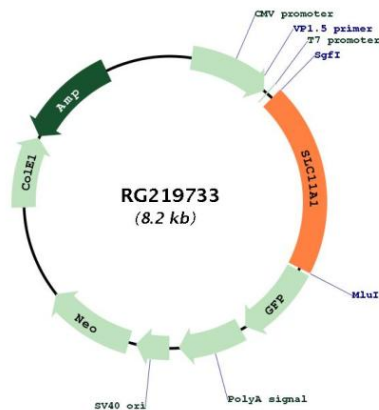
Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

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
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 RG219733