

Product datasheet for **RC214220**

SLC22A17 (NM_016609) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	SLC22A17 (NM_016609) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	SLC22A17
Synonyms:	24p3R; BOCT; BOIT; hBOIT; NGALR; NGALR2; NGALR3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>RC214220 representing NM_016609
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGCCTCGGACCCCATCTTACGCTGGCGCCCCGCTGCATTGCCACTACGGGGCCTTCCCCCTAATG
 CCTCTGGCTGGGAGCAGCCTCCCAATGCCAGCGCGTCAGCGTCGCCAGCGCTGCCCTAGCAGCCAGCGC
 CGCCAGCCGTGTGCGCACCAAGTACCGACCCCTCGTGCAGCGGCTTCGCCCCGCCGACTTCAACCATTGC
 CTCAAGGATTGGGACTATAATGGCCTTCTGTGCTCACCACCAACGCCATCGGCCAGTGGGATCTGGTGT
 GTGACCTGGGCTGGCAGGTGATCCTGGAGCAGATCCTTTCATCTTGGGCTTTCCTCCGGCTACCTGTT
 CCTGGTTACCCCGCAGACAGATTTGGCCGTCGCGGGATTGTGCTGCTGACCTTGGGGCTGGTGGGCCCC
 TGTGGAGTAGGAGGGGCTGCTGCAGGCTCCTCCACAGGCGTCATGGCCCTCGATTCTCTTGGGCTTTC
 TGCTTGCCGTGTGACCTGGGTGTCTACCTGATGCGCCTGGAGCTGTGCGACCAACCCAGAGGCTTCG
 GGTGGCCCTGGCAGGGGAGTTGGTGGGGTGGGAGGGCACTTCTGTTCTGGGCTGGCCCTTGTCTCT
 AAGGATTGGCGATTCTACAGCGAATGATCACCGCTCCCTGCATCCTCTTCTGTTTTATGGCTGGCCTG
 GTTTGTTCTGGAGTCCGCACGGTGGCTGATAGTGAAGCGGCAGATTGAGGAGGCTCAGTCTGTGCTGAG
 GATCCTGGCTGAGCGAAACCGGCCCATGGGCAGATGCTGGGGGAGGAGGCCAGGAGGCCCTGCAGGAC
 CTGGAGAAATACCTGCCCTCTCCCTGCAACATCCTCTTTCTTTGCTTCCCTCCTCAACTACCGCAACA
 TCTGGAAAAATCTGTTATCCTGGGCTTACCAACTTCATTGCCCATGCCATTGCCACTGCTACCAGCC
 TGTGGGAGGAGGGAGGCCATCGGACTTCTACCTGTGCTCTGCTGGCCAGCGGCACCGCAGCCCTG
 GCCTGTGCTTCTGGGGTACCGTGGACCGATTGGCCGCGGGGCATCCTTCTCTCCATGACCC
 TTACCGCATTGCTTCCCTGGTCTGCTGGGCTGTGGGATTATCTGAACGAGGCTGCCATCACCCTTT
 CTCTGCTTGGGCTCTTCTCCTCCCAAGCTGCCGCCATCCTCAGCACCCCTCTTGTCTGAGGTCATC
 CCCACCACTGTCCGGGGCGTGGCCTGGCCTGATCATGGCTCTAGGGGCGCTTGGAGGACTGAGCGGCC
 CGGCCAGCGCCTCCACATGGGCCATGGAGCCTTCTGCAGCACGTGGTCTGGCGGCTGCGCCCTCT
 CTGCATTCTCAGATTATGCTGCTGCCGGAGACCAAGCGCAAGCTCCTGCCCGAGGTGCTCCGGGACGGG
 GAGCTGTGTCGCCGGCCTTCCCTGCTGCGGCAGCCACCCCTACCGCTGTGACCACGTCCCGCTGCTTG
 CCACCCCAACCTGCCCTC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC214220 representing NM_016609
 Red=Cloning site Green=Tags(s)

MASDPIFTLAPPLHCHYGAFPPNASGWEPNAGVSVASAALAASAASRVATSTDPSCSGFAPPDFNHC
 LKDWDYNGLPVLTNAIGQWDLVCDLWQVILEQILFILGFASGYLFLGYPADRFRRRGI VLLTLGLVGP
 CGVGGAAAGSSTGVMALRFLGFLLAGVDLGVYLMRELECDPTQRLRVALAGELVGVGGHFLFLGLALVS
 KDWRFLQRMITAPCILFLFYGWPLFLESARWLVKRQIEEAQSVLRI LAERNRPHGQMLGEEAQEALQD
 LENTCPLPATSSFASLLNRYNIWKNLLILGFTNFI AHAIRHCYQPVGGGGSPDFYLC SLLASGTAAL
 ACVFLGVTVDRFGRRGILL SMTLTGIASLVLLGLWDYLNAAITTF SVLGLFSSQAAA ILSLLAAEVI
 PTTVRGRGLGLIMALGALGGLSGPAQRLHMGHGAFLQHVLAACALLCILSIMLLPETKRKLLPEVLRDG
 ELCRRPSLLRQPPPTRCDHVPLLATPNPAL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mg4626_b03.zip

Restriction Sites:

Sgfl-MluI

Cloning Scheme:



ACCN: NM_016609

ORF Size: 1560 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.

RefSeq: [NM_016609.4](#), [NP_057693.3](#)

RefSeq Size: 2344 bp

RefSeq ORF: 1563 bp

Locus ID: 51310

UniProt ID: [Q8WUG5](#)

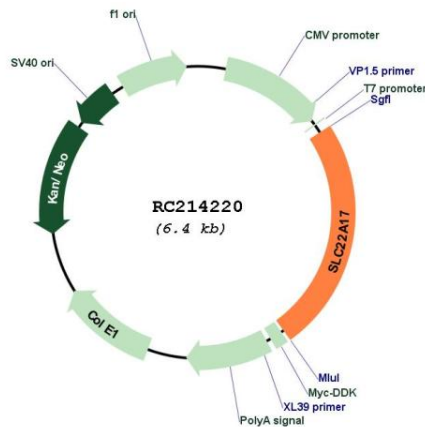
Cytogenetics: 14q11.2

Protein Families: Druggable Genome, Transmembrane

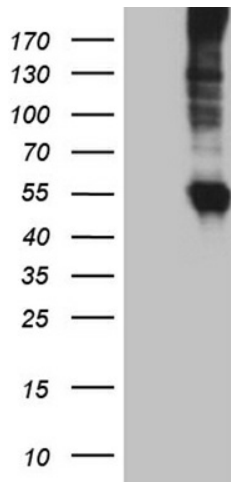
MW: 55.5 kDa

Gene Summary: Cell surface receptor for LCN2 (24p3) that plays a key role in iron homeostasis and transport. Able to bind iron-bound LCN2 (holo-24p3), followed by internalization of holo-24p3 and release of iron, thereby increasing intracellular iron concentration and leading to inhibition of apoptosis. Also binds iron-free LCN2 (apo-24p3), followed by internalization of apo-24p3 and its association with an intracellular siderophore, leading to iron chelation and iron transfer to the extracellular medium, thereby reducing intracellular iron concentration and resulting in apoptosis (By similarity).[UniProtKB/Swiss-Prot Function]

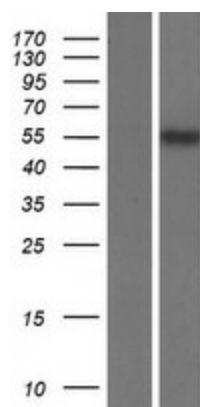
Product images:



Circular map for RC214220



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY SLC22A17 (Cat# RC214220, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-SLC22A17 (Cat# [TA810195])(1:500). Positive lysates [LY413864] (100ug) and [LC413864] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY413864]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC214220 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).