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Product datasheet for RC209689

C19orf28 (MFSD12) (NM_174983) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	C19orf28 (MFSD12) (NM_174983) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	C19orf28
Synonyms:	C19orf28; PP3501
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

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ORF Nucleotide Sequence:

>RC209689 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGGCCCGGGACCCCCAGCGGCCGGAGCGGCGCCGTCCCCGCGGCCGCTGTCCCTGGTGGCGCGGCTGA
GCTACGCCGTGGGCCACTTCCTCAACGACCTGTGCGCGTCCATGTGGTTCACCTACCTGCTGCTCTACCT
GCACTCGGTGCGCGCCTACAGCTCCCGCGGCGCGGGGCTGCTGCTGCTGCTGGGCCAGGTGGCCGACGGG
CTGTGCACACCGCTCGTGGGCTACGAGGCCGACCGCGCCGCCAGCTGCTGCGCCCGCTACGGCCCGCGCA
AGGCCTGGCACCTGGTCGGCACCGTCTGCGTCCTGCTGTCCTTCCCCTTCATCTTCAGCCCCTGCCTGGG
CTGTGGGGCGGCCACGCCCGAGTGGGCTGCCCTCCTCTACTACGGCCCGTTCATCGTGATCTTCCAGTTT
GGCTGGGCCTCCACACAGATCTCCCACCTCAGCCTCATCCCGGAGCTCGTCACCAACGACCATGAGAAGG
TGGAGCTCACGGCACTCAGGTATGCGTTCACCGTGGTGGCCAACATCACCGTCTACGGCGCCGCCTGGCT
CCTGCTGCACCTGCAGGGCTCGTCGCGGGTGGAGCCCACCCAAGACATCAGCATCAGCGACCAGCTGGGG
GGCCAGGACGTGCCCGTGTTCCGGAACCTGTCCCTGCTGGTGGTGGGTGTCGGCGCCGTGTTCTCACTGC
TATTCCACCTGGGCACCCGGGAGAGGCGCCGGCCGCATGCGGAGGAGCCAGGCGAGCACACCCCCCTGTT
GGCCCCTGCCACGGCCCAGCCCCTGCTGCTCTGGAAGCACTGGCTCCGGGAGCCGGCTTTCTACCAGGTG
GGCATACTGTACATGACCACCAGGCTCATCGTGAACCTGTCCCAGACCTACATGGCCATGTACCTCACCT
ACTCGCTCCACCTGCCCAAGAAGTTCATCGCGACCATTCCCCTGGTGATGTACCTCAGCGGCTTCTTGTC
CTCCTTCCTCATGAAGCCCATCAACAAGTGCATTGGGAGGAACATGACCTACTTCTCAGGCCTCCTGGTG
ATCCTGGCCTTTGCCGCCTGGGTGGCGCTGGCGGAGGGACTGGGTGTGGCCGTGTACGCAGCGGCTGTGC
TGCTGGGTGCTGGCTGTGCCACCATCCTCGTCACCTCGCTGGCCATGACGGCCGACCTCATCGGTCCCCA
CACGAACAGCGGAGCGTTCGTGTACGGCTCCATGAGCTTCTTGGATAAGGTGGCCAATGGGCTGGCAGTC
ATGGCCATCCAGAGCCTGCACCCTTGCCCCTCAGAGCTCTGCTGCAGGGCCTGCGTGAGCCTTTACCACT
GGGCGATGGTGGCTGTGACGGGCGGCGTGGGCGTGGCCGCTGCCCTGTGTCTCTGTAGCCTCCTGCTGTG
GCCGACCCGCCTGCGACGCTGGGACCGTGATGCCCGGCCC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC209689 protein sequence
Red=Cloning site Green=Tags(s)

MGPGPPAAGAAPSPRPLSLVARLSYAVGHFLNDLCASMWFTYLLLYLHSVRAYSSRGAGLLLLLGQVADG
LCTPLVGYEADRAASCCARYGPRKAWHLVGTVCVLLSFPFIFSPCLGCGAATPEWAALLYYGPFIVIFQF
GWASTQISHLSLIPELVTNDHEKVELTALRYAFTVVANITVYGAAWLLLHLQGSSRVEPTQDISISDQLG
GQDVPVFRNLSLLVVGVGAVFSLLFHLGTRERRRPHAEEPGEHTPLLAPATAQPLLLWKHWLREPAFYQV
GILYMTTRLIVNLSQTYMAMYLTYSLHLPKKFIATIPLVMYLSGFLSSFLMKPINKCIGRNMTYFSGLLV
ILAFAAWVALAEGLGVAVYAAAVLLGAGCATILVTSLAMTADLIGPHTNSGAFVYGSMSFLDKVANGLAV
MAIQSLHPCPSELCCRACVSLYHWAMVAVTGGVGVAAALCLCSLLLWPTRLRRWDRDARP

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6709_f04.zip

Restriction Sites: SgfI-MluI

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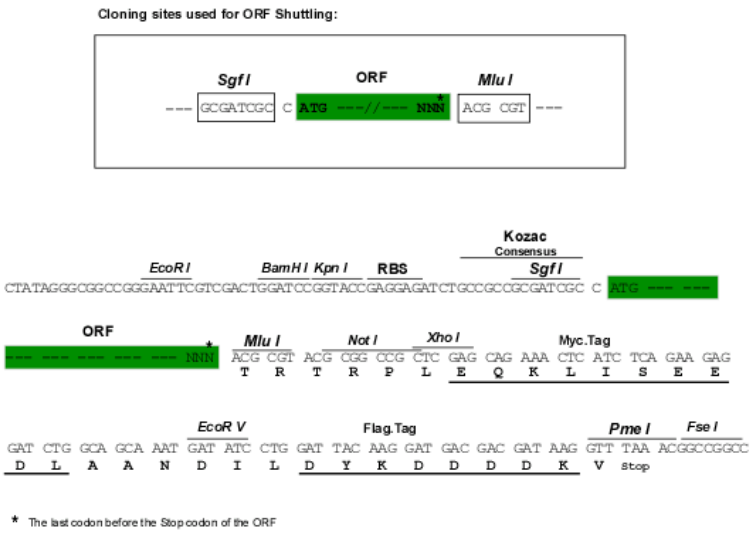
Cloning Scheme:



ACCN: NM_174983

ORF Size: 1440 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.

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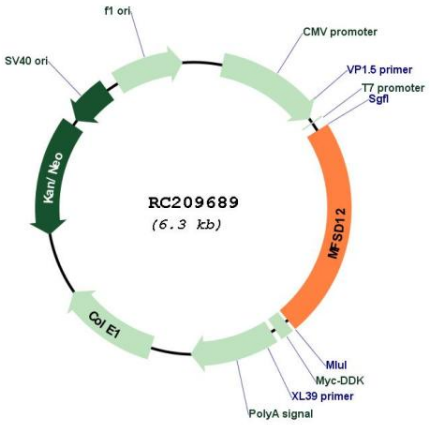
RefSeq:	NM_174983.5
RefSeq Size:	2149 bp
RefSeq ORF:	1443 bp
Locus ID:	126321
UniProt ID:	Q6NUT3
Cytogenetics:	19p13.3
Protein Families:	Transmembrane
MW:	52 kDa
Gene Summary:	Transporter that mediates the import of cysteine into melanosomes, thereby regulating skin pigmentation (PubMed:33208952). In melanosomes, cysteine import is required both for normal levels of cystine, the oxidized dimer of cysteine, and provide cysteine for the production of the cysteinyldopas used in pheomelanin synthesis, thereby regulating skin pigmentation (PubMed:33208952). Also catalyzes import of cysteine into lysosomes in non-pigmented cells (PubMed:33208952).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for RC209689

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