

Product datasheet for **RC238422**

C19orf28 (MFSD12) (NM_001287529) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	C19orf28 (MFSD12) (NM_001287529) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	MFSD12
Synonyms:	C19orf28; PP3501
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



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ORF Nucleotide Sequence:

>RC238422 representing NM_001287529
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCCCGCATCGCC

ATGGGCCCGGACCCCCAGCGGCCGGAGCGGCCCGCTCCCGCGGCCGCTGTCCCTGGTGGCGCGGCTGA
 GCTACGCCGTGGGCCACTTCTCAACGACTGTGCGCGTCCATGTGGTTACCTACCTGCTGCTCTACCT
 GCACTCGGTGCGCGCCTACAGCTCCCGCGGCCGGGGCTGCTGCTGCTGGGCCAGGTGGCCGACGGG
 CTGTGCACACCGCTCGTGGGCTACGAGGCCGACCGCGCCGACAGTGTGCGCCGCTACGGCACCGTCT
 GCGTCTGCTGTCTTCCCCTTTCATCTTACGCCCTGCCTGGGCTGTGGGGCGGCCACGCCGAGTGGGC
 TGCCCTCTCTACTACGGCCGTTTCATCGTGATCTTCCAGTTTGGCTGGGCTCCACACAGATCTCCAC
 CTCAGCCTCATCCGGAGCTCGTACCAACGACCATGAGAAGGTGGAGCTCACGGCACTCAGGTATCGGT
 TCACCGTGGTGGCAACATCACCGTCTACGGCGCCGCTGGCTCCTGCTGCACCTGCAGGGCTCGTCGG
 GGTGGAGCCACCAAGACATCAGCATCAGCGACCAGTGGGGGCCAGGACGTGCCCGTGTCCGGAAC
 CTGTCCCTGCTGGTGGTGGGTGTGCGCGCGTGTCTCACTGCTATTCCACCTGGGCACCCGGGAGAGGC
 GCCGGCCGCATGCGGAGGAGCCAGGCGAGCACACCCCCCTGTTGGCCCTGCCACGGCCAGCCCTGCT
 GCTCTGGAAGCACTGGCTCCGGGAGCCGGCTTTTACCAGGTGGGCATACTGTACATGACCACAGGCTC
 ATCGTGAACCTGTCCCAGACCTACATGGCCATGTACCTCACCTACTCGTCCACCTGCCAAGAAGTTCA
 TCGCGACCATCCCCTGGTGATGTACCTCAGCGGCTTCTGTCTCTCTTCTCATGAAGCCCATCAACAA
 GTGCATTGGGAGGAACATGACCTACTTCTCAGGCTCCTGGTGATCCTGGCCTTGGCCGCTGGTGGCG
 CTGGCGGAGGACTGGGTGTGGCCGTGTACGACGCGGCTGTGCTGCTGGTGTGGCTGTGCCACCATCC
 TCGTCACTCGCTGGCCATGACGCGCCGACCTCATCGGTCCACACGAACAGCGGAGCGTTCGTGTACGG
 CTCATGAGCTTCTTGGATAAAGGTGGCCAATGGGCTGGCAGTCATGGCCATCCAGAGCCTGCACCCCTTGC
 CCCTCAGAGCTCTGCTGCAGGGCTGCGTGAGCTTTTACCAGTGGCGATGGTGGCTGTGACGGCGGCG
 TGGGCGTGGCCGCTGCCCTGTGTCTGTAGCCTCCTGCTGTGGCCGACCCGCTGCGACGCTGGGACCG
 TGATGCCCGGCC

ACCGGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC238422 representing NM_001287529
 Red=Cloning site Green=Tags(s)

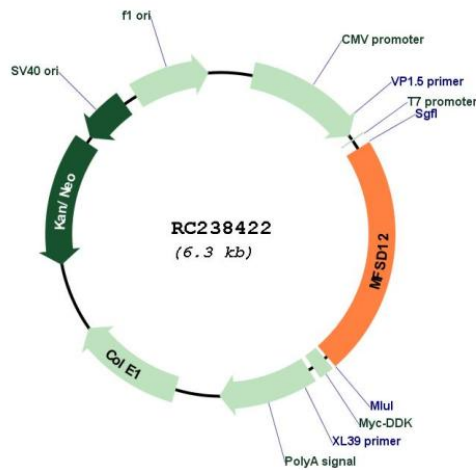
MGPGPPAAGAAPSPRPLSLVARLSYAVGHFLNDLCASMWFTYLLLYLHSVRAVSSRGAGLLLLLQGVADG
 LCTPLVGYEADRAASCCARYGTVCVLLSFPFIFSPCLGCGAATPEWAALLYGPFIVIFQFGWASTQISH
 LSLIPELVTNDHEKVELTALRYAFTVVANITVYGAALLHLQGSSRVEPTQDISISDQLGGQDVPVFRN
 LSLLVGVGAVFSLLFHLGTRERRRRPHAEPEHTPLAPATAQPLLLWKHWLREPAFYQVGIYMTTRL
 IVNLSQTYMAMYLTYSLHLPKFIATIPLVMYLSGFLSSFLMKPINKCIGRNMTYFSGLLVILFAAWVA
 LAEGLGVAVYAAVLLGAGCATILVTSLAMTADLIGPHTNSGAFVYGSMSFLDKVANGLAVMAIQSLHPC
 PSELCRACVSFYHWAMVAVTGGVGVAAALCLCSLLLWPTRLRRWRDAR

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

SgfI-MluI

Cloning Scheme:

Plasmid Map:


ACCN: NM_001287529

ORF Size: 1413 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:	<ol style="list-style-type: none">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_001287529.1 , NP_001274458.1
RefSeq Size:	2122 bp
RefSeq ORF:	1416 bp
Locus ID:	126321
UniProt ID:	Q6NUT3
Cytogenetics:	19p13.3
Protein Families:	Transmembrane
MW:	51.5 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 cysteinyl dopas 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]