

Product datasheet for **RG238422**

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:	TurboGFP
Symbol:	C19orf28
Synonyms:	C19orf28; PP3501
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG238422 representing NM_001287529. Blue=ORF Red=Cloning site Green=Tag(s)

GCTCGTTTAGTGAACCGTCAGAATTTTGTAAACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTG
 GATCCGGTACCGAGGAGATCTGCCGCC**CGCATCGCC**
 ATGGGCCCGGGACCCCCAGCGGCCGAGCGCGCCGTCCCGCGGCCGCTGTCCCTGGTGGCGCGGCTG
 AGCTACGCGGTGGGCCACTTCTCAACGACCTGTGCGCGTCCATGTGGTTCACCTACCTGCTGCTAC
 CTGCACTCGGTGCGCGCTACAGCTCCCGCGGCCGCGGGGCTGCTGCTGCTGCTGGGCCAGGTGGCCGAC
 GGGCTGTGCACACCGCTCGTGGGCTACGAGGCCGACCGCGCCGCCAGCTGCTGCGCCCGTACGGCACC
 GTCTGCGTCTGCTGTCTTCCCTTCATCTTCAGCCCTGCCTGGGCTGTGGGGCGGCCACGCCGAG
 TGGGCTGCCCTCTACTACGGCCGTTTCATCGTGATCTTCCAGTTTGGCTGGGCTCCACACAGATC
 TCCACCTCAGCCTCATCCCGGAGCTCGTCACCAACGACCATGAGAAGGTGGAGCTCACGGCACTCAGG
 TATGCGTTCACCGTGGTGGCCAACATCACCGTCTACGGCGCCGCTGGCTCCTGTGACCTGCAGGGC
 TCGTCGCGGGTGGAGCCACCAAGACATCAGCATCAGCGACCGAGCTGGGGGGCCAGGACGTGCCCGTG
 TTCCGGAACCTGTCCCTGCTGGTGGTGGGTGTGCGCGCCGTGTTCTCACTGCTATTCCACCTGGGCACC
 CGGGAGAGGCGCCGCGCCGATGCGGAGGAGCCAGGCGAGCACACCCCTGTTGGCCCTGCCACGGCC
 CAGCCCTGCTGCTCTGGAAGCACTGGCTCCGGGAGCCGGCTTCTACAGGTGGGCATACTGTACATG
 ACCACAGGCTCATCGTGAACCTGTCCAGACCTACATGGCCATGTACCTCACCTACTCGCTCCACCTG
 CCCAAGAAGTTCATCGCGACCATCCCTGGTGATGTACCTCAGCGGCTTCTTGTCTCCTCCTCATG
 AAGCCCATCAACAAGTGCAATGGGAGGAACATGACCTACTTCTCAGGCCCTCTGGTGATCCTGGCCTTT
 GCCGCTGGGTGGCGCTGGCGGAGGACTGGGTGTGGCCGTGTACGCAGCGGCTGTGCTGCTGGGTGCT
 GGCTGTGCCACCATCCTCGTCACCTCGCTGGCCATGACGGCCGACCTCATCGGTCCCCACACGAACAGC
 GGAGCGTTCGTGTACGGCTCCATGAGCTTCTGGATAAGGTGGCCAATGGGCTGGCAGTCATGGCCATC
 CAGAGCCTGCACCCTTGGCCCTCAGAGCTCTGCTGCAGGGCTGCGTGAGCTTTTACCACTGGGCGATG
 GTGGCTGTGACGGGCGCGTGGGCGTGGCCGTGCCCTGTGTCTGTAGCCTCCTGCTGTGGCCGACC
 CGCCTGCGACGCTGGGACCGTGATGCCCGCCC
ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTAAAC

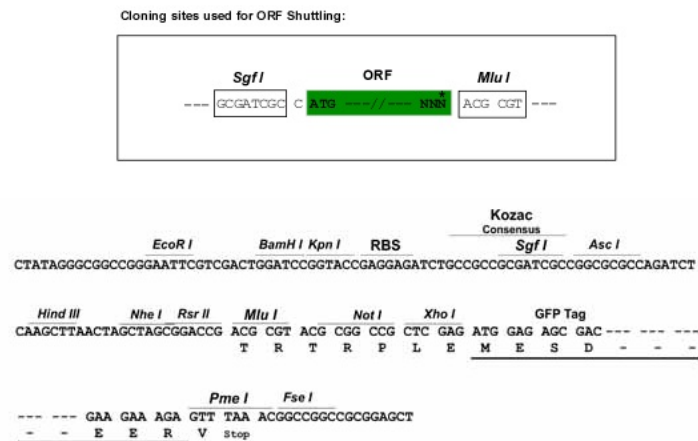

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Protein Sequence: >Peptide sequence encoded by RG238422
 Blue=ORF Red=Cloning site Green=Tag(s)

MGPGPPAAGAAPSPRPLSLVARLSYAVGHFLNDLCASMWFTYLLLYLHVSRYSSRGAGLLLLLGQVAD
 GLCTPLVGYEADRAASCCARYGTVCVLLSFPFIFSPCLGCGAATPEWAALLYGPFIVIFQGWASTQI
 SHLSLIPELVNDHEKVELTALRYAFTVVANITVYGAWLLHLQGSSRVEPTQDISISDQLGGQDVPV
 FRNLSLLVVGAVFSLLFHLGTRERRRPHAEPEGHTPLAPATAQPLLLWKHWLREPAFYQVGILYM
 TTRLIVNLSQTYMAMYLTYSLHLPKKFIATIPLVMYLSGFLSSFLMKPINKCIGRNMTYFSGLLVILAF
 AAWVALAEGLGAVYAAAVLLGAGCATILVTSAMTADLIGPHTNSGAFVYGSMSFLDKVANGLAYMAI
 QSLHPCSELCCRACVSFYHWAMVAVTGGVGAAALCLCSLLWPTRLRRWRDARP
TRTRPLEMESDESGLPAMEIECRITGTLNGVEFELVGGEGTPEQGRMTNKMSTKGALTFSPYLLSHV
 MGYGFYHFGTYPSGYENPFLHAINNGGYTNTRIEKYEDGGVLHVSFSYRYEAGRVIGDFKVMGTGFPED
 SVIFTDKIIRSNAVEHLHPMGDNDLDGSFTRTFSLRDGGYSSVVDSHMHFKSAIHPSILQNGGPMFA
 FRRVEEDHSNTELGIVEYQHAFKTPDADAGEERV

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001287529

ORF Size: 1434 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](#)

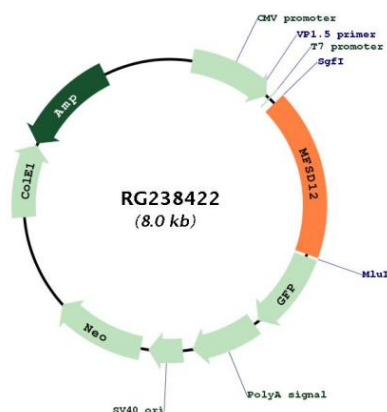
OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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).

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq:	<u>NM_001287529.1, NP_001274458.1</u>
RefSeq Size:	2122 bp
RefSeq ORF:	1416 bp
Locus ID:	126321
UniProt ID:	<u>Q6NUT3</u>
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]

Product images:



Circular map for RG238422