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Product datasheet for SC308697

Repulsive Guidance Molecule C (HFE2) (NM_213652) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Repulsive Guidance Molecule C (HFE2) (NM_213652) Human Untagged Clone
Tag:	Tag Free
Symbol:	Repulsive Guidance Molecule C
Synonyms:	HFE2; HFE2A; JH; RGMC
Mammalian Cell Selection:	None
Vector:	pCMV6-XL4
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>NCBI ORF sequence for NM_213652, the custom clone sequence may differ by one or more nucleotides ATGCAGGAATGCATTGATCAGAAGGTGTATCAGGCTGAGGTGGATAATCTTCCTGTAGCC TTTGAAGATGGTTCTATCAATGGAGGTGACCGACCTGGGGGATCCAGTTTGTCGATTCAA ACTGCTAACCCTGGGAACCATGTGGAGATCCAAGCTGCCTACATTGGCACAACTATAATC ATTCGGCAGACAGCTGGGCAGCTCTCCTTCTCCATCAAGGTAGCAGAGGATGTGGCCATG GCCTTCTCAGCTGAACAGGACCTGCAGCTCTGTGTTGGGGGGTGCCCTCCAAGTCAGCGA CTCTCTCGATCAGAGCGCAATCGTCGGGGAGCTATAACCATTGATACTGCCAGACGGCTG TGCAAGGAAGGGCTTCCAGTGGAAGATGCTTACTTCCATTCCTGTGTCTTTGATGTTTTA ATTTCTGGTGATCCCAACTTTACCGTGGCAGCTCAGGCAGCACTGGAGGATGCCCGAGCC TTCCTGCCAGACTTAGAGAAGCTGCATCTCTTCCCCTCAGATGCTGGGGTTCCTCTTTCC TCAGCAACCCTCTTAGCTCCACTCCTTTCTGGGCTCTTTGTTCTGTGGCTTTGCATTCAG TAA
Restriction Sites:	Please inquire
ACCN:	NM_213652

View online »

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 TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.
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_213652.2, NP_998817.1
RefSeq Size:	1382 bp
RefSeq ORF:	603 bp
Locus ID:	148738
UniProt ID:	Q6ZVN8
Cytogenetics:	1q21.1
Protein Families:	Transmembrane

Gene Summary: The product of this gene is involved in iron metabolism. It may be a component of the signaling pathway which activates hepcidin or it may act as a modulator of hepcidin expression. It could also represent the cellular receptor for hepcidin. Two uORFs in the 5' UTR negatively regulate the expression and activity of the encoded protein. Alternatively spliced transcript variants encoding different isoforms have been identified for this gene. Defects in this gene are the cause of hemochromatosis type 2A, also called juvenile hemochromatosis (JH). JH is an early-onset autosomal recessive disorder due to severe iron overload resulting in hypogonadotrophic hypogonadism, hepatic fibrosis or cirrhosis and cardiomyopathy, occurring typically before age of 30. [provided by RefSeq, Oct 2015]
Transcript Variant: This variant (d) lacks a segment in the 5' UTR and an in-frame portion of the 5' coding region, compared to variant a. The resulting isoform (c) has a shorter N-terminus when compared to isoform a. Variants c, d, and e all encode the same isoform (c).