

## Product datasheet for RC220228L4

#### OriGene Technologies, Inc.

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### Repulsive Guidance Molecule C (HFE2) (NM 145277) Human Tagged Lenti ORF Clone

#### **Product data:**

**Product Type:** Expression Plasmids

**Product Name:** Repulsive Guidance Molecule C (HFE2) (NM\_145277) Human Tagged Lenti ORF Clone

Tag: mGFP

Symbol: Repulsive Guidance Molecule C

Synonyms: HFE2; HFE2A; JH; RGMC

Mammalian Cell

Selection:

Puromycin

**Vector:** pLenti-C-mGFP-P2A-Puro (PS100093)

E. coli Selection: Chloramphenicol (34 ug/mL)

**ORF Nucleotide** 

The ORF insert of this clone is exactly the same as(RC220228).

Sequence:

**Restriction Sites:** Sgfl-Mlul

**Cloning Scheme:** 





<sup>\*</sup> The last codon before the Stop codon of the ORF

**ACCN:** NM\_145277

ORF Size: 939 bp





# Repulsive Guidance Molecule C (HFE2) (NM\_145277) Human Tagged Lenti ORF Clone – RC220228L4

**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:** <u>NM 145277.3</u>

 RefSeq Size:
 1961 bp

 RefSeq ORF:
 942 bp

 Locus ID:
 148738

 UniProt ID:
 06ZVN8

Cytogenetics: 1q21.1

**Protein Families:** Transmembrane

MW: 33.5 kDa

**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

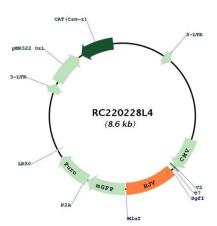
expression. It could also represent the cellular receptor for hepcidin. Two uORFs in the 5' UTR negatively regulate the expression and activity of the encoded protein. Alternatively spliced transcript variants encoding different isoforms have been identified for this gene. Defects in this gene are the 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]



# **Product images:**



Circular map for RC220228L4