

Product datasheet for **RG237553**

HFE (NM_001300749) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	HFE (NM_001300749) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	HFE
Synonyms:	HFE1; HH; HLA-H; MVCD7; TFQTL2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG237553 representing NM_001300749. Blue=ORF Red=Cloning site Green=Tag(s)

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GCTCGTTTAGTGAACCGTCAGAATTTGTAAACGACTCACTATAGGGCCGCCGGGAATTCGTCGACTG
GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC
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GGGTATGATGGGCAGGACCACCTTGAATTCGCCCTGACACACTGGATTGGAGAGCAGCAGAACCAGG
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GAGCAGAGATACGTGCCAGGTGGAGCACCCAGGCCCTGGATCAGCCCCCATTGTGATCTGGGAGCCC
TCACCGCTGGCACCCCTAGTCATTGGAGTCATCAGTGAATTGCTGTTTTGTGTCATCTTGTTCATT
GGATTTTGTTCATAATATTAAGGAAGAGCAGGGTTCAAGTTTC
ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAAAC
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Protein Sequence: >Peptide sequence encoded by RG237553
 Blue=ORF Red=Cloning site Green=Tag(s)

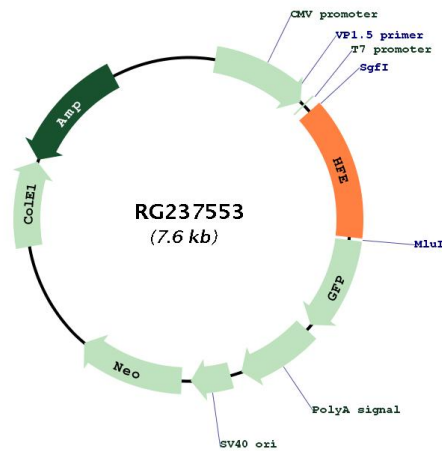
MGPRARPALLLLMLLQTAVLQGRLLRSHSLHYLFMGASEQDLGLSLFEALGYVDDQLFVFDHESRRVE
 P RTPWVSSRISSQMWLQLSLSLKGWDHMFVDFWTIMENHNHSKESHTLQVILGCEMQEDNSTEGYWY
 GYDGDHLEFCPDTLDWRAAEPRAWPTKLEWERHKIRARQNRAYLERDCAQLQLLELGRGVLDDQVVP
 PLVKVTHHVTSSVTTLCRALNYYPNITMKWLKDKQPMDAKEFEPKDVLPNGDGTYYQGWITLAVPPGE
 EQRYTCQVEHPGLDQPLIVIEWEPPSGTLVIGVISGIAVFFVILFIGILFIIILRKRQSSSF
 TRTRPLEMESDESGLPAMEIECRITGTLNGVEFELVGGGEGTPEQGRMTNKMKSTKGALTFSPYLLSHV
 MGYGFYHFGTYPSTYENPFLHAINNGGYNTRIEKYEDGGVLHVSFSYRYEAGRVIGDFKVMGTGFPEP
 SVIFTDKIIIRSNATVEHLHPMGDNDLDGSFTRTFSLRDGGYSSVVDSHMHFKSAIHPSILQNGGPMFA
 FRRVEEDHSNTELGIVEYQHAFKTPDADAGEERV

Restriction Sites: SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_001300749

ORF Size:	1011 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).
RefSeq:	NM_001300749.2
RefSeq Size:	2004 bp
RefSeq ORF:	1014 bp
Locus ID:	3077
UniProt ID:	Q30201
Cytogenetics:	6p22.2
Protein Families:	Druggable Genome, Transmembrane
MW:	39.3 kDa
Gene Summary:	The protein encoded by this gene is a membrane protein that is similar to MHC class I-type proteins and associates with beta2-microglobulin (beta2M). It is thought that this protein functions to regulate iron absorption by regulating the interaction of the transferrin receptor with transferrin. The iron storage disorder, hereditary haemochromatosis, is a recessive genetic disorder that results from defects in this gene. At least nine alternatively spliced variants have been described for this gene. Additional variants have been found but their full-length nature has not been determined. [provided by RefSeq, Jul 2008]