

## Product datasheet for **TL304120**

### Repulsive Guidance Molecule C (HFE2) Human shRNA Plasmid Kit (Locus ID 148738)

#### Product data:

Product Type:	shRNA Plasmids
Product Name:	Repulsive Guidance Molecule C (HFE2) Human shRNA Plasmid Kit (Locus ID 148738)
Locus ID:	148738
Synonyms:	HFE2; HFE2A; JH; RGMC
Vector:	pGFP-C-shLenti (TR30023)
E. coli Selection:	Chloramphenicol (34 ug/ml)
Mammalian Cell Selection:	Puromycin
Format:	Lentiviral plasmids
Components:	HFE2 - Human, 4 unique 29mer shRNA constructs in lentiviral GFP vector(Gene ID = 148738). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pGFP-C-shLenti Vector, TR30021, included for free.
RefSeq:	<a href="#">NM_001316767</a> , <a href="#">NM_145277</a> , <a href="#">NM_202004</a> , <a href="#">NM_213652</a> , <a href="#">NM_213653</a> , <a href="#">NM_213652.1</a> , <a href="#">NM_213652.2</a> , <a href="#">NM_213652.3</a> , <a href="#">NM_202004.1</a> , <a href="#">NM_202004.2</a> , <a href="#">NM_202004.3</a> , <a href="#">NM_213653.1</a> , <a href="#">NM_213653.2</a> , <a href="#">NM_213653.3</a> , <a href="#">NM_145277.1</a> , <a href="#">NM_145277.2</a> , <a href="#">NM_145277.3</a> , <a href="#">NM_145277.4</a> , <a href="#">BC085604</a> , <a href="#">BC085604.1</a> , <a href="#">BC017926</a> , <a href="#">NM_213653.4</a> , <a href="#">NM_202004.4</a> , <a href="#">NM_145277.5</a>
UniProt ID:	<a href="#">Q6ZVN8</a>
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]
shRNA Design:	These shRNA constructs were designed against multiple splice variants at this gene locus. To be certain that your variant of interest is targeted, please contact <a href="mailto:techsupport@origene.com">techsupport@origene.com</a> . If you need a special design or shRNA sequence, please utilize our <a href="#">custom shRNA service</a> .



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**Performance  
Guaranteed:**

OriGene guarantees that the sequences in the shRNA expression cassettes are verified to correspond to the target gene with 100% identity. One of the four constructs at minimum are guaranteed to produce 70% or more gene expression knock-down provided a minimum transfection efficiency of 80% is achieved. Western Blot data is recommended over qPCR to evaluate the silencing effect of the shRNA constructs 72 hrs post transfection. To properly assess knockdown, the gene expression level from the included scramble control vector must be used in comparison with the target-specific shRNA transfected samples.

For non-conforming shRNA, requests for replacement product must be made within ninety (90) days from the date of delivery of the shRNA kit. To arrange for a free replacement with newly designed constructs, please contact Technical Services at [techsupport@origene.com](mailto:techsupport@origene.com). Please provide your data indicating the transfection efficiency and measurement of gene expression knockdown compared to the scrambled shRNA control (Western Blot data preferred).