

#### **OriGene Technologies, Inc.**

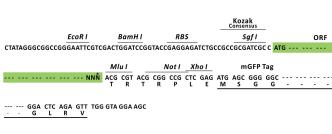
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# Product datasheet for RC217863L4

#### HNF 4 alpha (HNF4A) (NM\_000457) Human Tagged Lenti ORF Clone

### **Product data:**

| Product Type:                | Expression Plasmids   |
|------------------------------|---|
| Product Name:                | HNF 4 alpha (HNF4A) (NM_000457) Human Tagged Lenti ORF Clone                                      |
| Tag:                         | mGFP  |
| Symbol:                      | HNF 4 alpha   |
| Synonyms:                    | FRTS4; HNF4; HNF4a7; HNF4a8; HNF4a9; HNF4alpha; MODY; MODY1; NR2A1; NR2A21; TCF;<br>TCF-14; TCF14 |
| Mammalian Cell<br>Selection: | Puromycin   |
| Vector:                      | pLenti-C-mGFP-P2A-Puro (PS100093)   |
| E. coli Selection:           | Chloramphenicol (34 ug/mL)  |
| ORF Nucleotide<br>Sequence:  | The ORF insert of this clone is exactly the same as(RC217863).                                    |
| <b>Restriction Sites:</b>    | Sgfl-Mlul   |
| Cloning Scheme:              |   |
|                              | Cloning sites used for ORF Shuttling:   |



ORF

--- GCG ATC GC ATG --- // --- NNN ACG CGT ---

Mlu I

Safl

\* The last codon before the Stop codon of the ORF.

ACCN: ORF Size: NM\_000457 1422 bp



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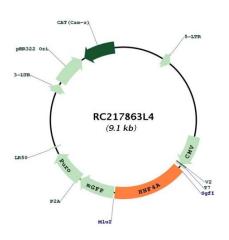
|                       | 4 alpha (HNF4A) (NM_000457) Human Tagged Lenti ORF Clone – RC217863L4  |
|-----------------------|--|
| OTI Disclaimer:       | Due to the inherent nature of this plasmid, standard methods to replicate additional amounts<br>of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore,<br>OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts<br>of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a<br>reduced cost. Please contact our customer care team at <u>custsupport@origene.com</u> or by<br>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. <u>More info</u>  |
| 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 | <ol> <li>Centrifuge at 5,000xg for 5min.</li> <li>Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li> <li>Close the tube and incubate for 10 minutes at room temperature.</li> <li>Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li> <li>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.</li> </ol>   |
| RefSeq:               | <u>NM 000457.4</u>   |
| RefSeq Size:          | 4737 bp  |
| RefSeq ORF:           | 1425 bp  |
| Locus ID:             | 3172   |
| UniProt ID:           | <u>P41235</u>  |
| Cytogenetics:         | 20q13.12   |
| Protein Families:     | Druggable Genome, ES Cell Differentiation/IPS, Nuclear Hormone Receptor, Transcription<br>Factors  |
| Protein Pathways:     | Maturity onset diabetes of the young   |
| MW:                   | 53.2 kDa   |

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Gene Summary:The protein encoded by this gene is a nuclear transcription factor which binds DNA as a<br/>homodimer. The encoded protein controls the expression of several genes, including<br/>hepatocyte nuclear factor 1 alpha, a transcription factor which regulates the expression of<br/>several hepatic genes. This gene may play a role in development of the liver, kidney, and<br/>intestines. Mutations in this gene have been associated with monogenic autosomal dominant<br/>non-insulin-dependent diabetes mellitus type I. Alternative splicing of this gene results in<br/>multiple transcript variants encoding several different isoforms. [provided by RefSeq, Apr<br/>2012]

## **Product images:**



bp 10000 8000 6000 5000 4000 3500 3500 2500 - 1500 - 1500 - 1500 - 1500 - 2500 - Circular map for RC217863L4

Double digestion of RC217863L4 using Sgfl and Mlul

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