

Product datasheet for **RG211201**

HNF1 alpha (HNF1A) (NM_000545) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	HNF1 alpha (HNF1A) (NM_000545) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	HNF1 alpha
Synonyms:	HNF-1A; HNF1; HNF1alpha; HNF4A; IDDM20; LFB1; MODY3; TCF-1; TCF1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>RG211201 representing NM_000545
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**GCGATCGCC**

ATGGTTTCTAAACTGAGCCAGCTGCAGACGGAGCTCCTGGCGGCCCTGCTGGAGTCAGGGCTGAGCAAAG
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 GAGCCACCTGCTGCCATCAACACAGCGTATCGAGACCTTATCTCCACCCAGATGGCCTCTCTCTCC
 CAG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>RG211201 representing NM_000545
 Red=Cloning site Green=Tags(s)

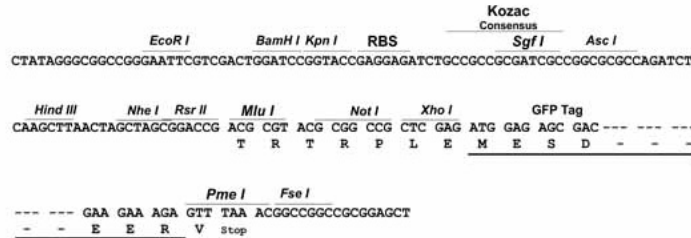
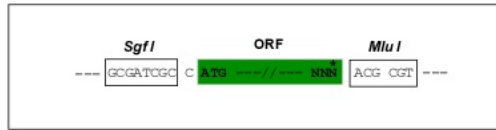
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 QATTLHVPSQDPAGIQLQPAHRLSASPTVSSSLVLVQSSDSSNGSHLLPSNHSVIETFISTQMASS
 Q

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:



ACCN: NM_000545

ORF Size: 1893 bp

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 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: [NM_000545.3](#), [NP_000536.3](#)

RefSeq Size: 3249 bp

RefSeq ORF: 1896 bp

Locus ID: 6927

UniProt ID: [P20823](#)

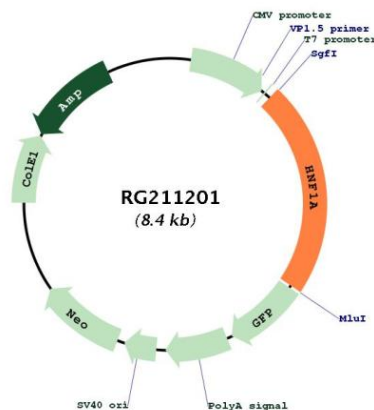
Cytogenetics: 12q24.31

Protein Families: Adult stem cells, Druggable Genome, ES Cell Differentiation/IPS, Transcription Factors

Protein Pathways: Maturity onset diabetes of the young

Gene Summary: The protein encoded by this gene is a transcription factor required for the expression of several liver-specific genes. The encoded protein functions as a homodimer and binds to the inverted palindrome 5'-GTTAATNATTAAC-3'. Defects in this gene are a cause of maturity onset diabetes of the young type 3 (MODY3) and also can result in the appearance of hepatic adenomas. Alternative splicing results in multiple transcript variants encoding different isoforms. [provided by RefSeq, Apr 2015]

Product images:



Circular map for RG211201