

Product datasheet for **RG238302**

HNF 4 alpha (HNF4A) (NM_001287183) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	HNF 4 alpha (HNF4A) (NM_001287183) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	HNF4A
Synonyms:	FRTS4; HNF4; HNF4a7; HNF4a8; HNF4a9; HNF4alpha; MODY; MODY1; NR2A1; NR2A21; TCF; TCF-14; TCF14
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>RG238302 representing NM_001287183.
 Blue=ORF Red=Cloning site Green=Tag(s)

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GCTCGTTTAGTGAACCGTCAGAATTTTGTAAACGACTCACTATAGGGCGGCCGGGAATTCGTGACTG
GATCCGGTACCGAGGAGATCTGCCGCCCGCATCGCC
ATGTCGGACTGGGGCCAGGGCTTCCCCAGGACCCACAGACACGTCCCCATCAGAAGGCCACCAACCTC
AACCGCCCAACAGCCTGGGTGTCAGCGCCTGTGTCCATCTGCGGGGACCGGGCCACGGGCAAACAC
TACGGTGCCTCGAGCTGTGACGGCTGCAAGGGCTTCTTCCGGAGGAGCGTGCGGAAGAACCACATGTAC
TCCTGCAGATTTAGCCGGCAGTGCCTGGTGGACAAAGACAAGAGGAACCAGTGCCGCTACTGCAGGCTC
AAGAAATGCTTCCGGGCTGGCATGAAGAAGGAAGCCGTCCAGAATGAGCGGGACCGGATCAGCACTCGA
AGGTCAAGCTATGAGGACAGCAGCCTGCCCTCCATCAATGCGCTCCTGCAGGGGAGGTCCTGTCCCGA
CAGATCACCTCCCCGTCTCCGGGATCAACGGCGACATTCGGGCGAAGAAGATTGCCAGCATCGCAGAT
GTGTGTGAGTCCATGAAGGAGCAGCTGCTGTTCTCGTTGAGTGGGCCAAGTACATCCCAGCTTTCTGC
GAGCTCCCCCTGGACGACCAGGTGGCCCTGCTCAGAGCCCATGCTGGCGAGCACCTGCTGCTCGGAGCC
ACCAAGAGATCCATGGTGTTCAGGACGTGCTGCTCCTAGGCAATGACTACATTGCTCCCTCGGCACTGC
CCGGAGCTGGCGGAGATGAGCCGGGTGCCATACGCATCCTTGACGAGCTGGTGTGCCCTTCAGGAG
CTGCAGATCGATGACAATGAGTATGCCTACCTCAAAGCCATCATCTTCTTTGACCAGATGCCAAGGGG
CTGAGCGATCCAGGAAGATCAAGCGGCTGCGTCCCAGGTGCAGGTGAGCTTGGAGGACTACATCAAC
GACCGCCAGTATGACTCGCGTGGCCGCTTTGGAGAGCTGCTGCTGCTGCTGCCACCTTGCAGAGCATC
ACCTGGCAGATGATCGAGCAGATCCAGTTCATCAAGCTCTTCGGCATGGCCAAGATTGACAACTGTTG
CAGGAGATGCTGCTGGGAGGGTCCCCAGCGATGCACCCCATGCCACCACCCCTGCACCCTCACCTG
ATGCAGGAACATATGGGAACCAACGTATCGTTGCCAACACAATGCCACTCACCTCAGCAACGGACAG
ATGTGTGAGTGGCCCCGACCCAGGGGACAGCCAGCCACCCTGAGACCCACAGCCCTCACCGCCAGGT
GGCTCAGGGTCTGAGCCCTATAAGCTCCTGCCGGGAGCCGTCGCCACAATCGTCAAGCCCCTCTCTGCC
ATCCCCAGCCGACCATACCAAGCAGGAAGTTATC
ACGCGTACCGGCCGCTCGAG - GFP Tag - GTTAAAC
```

Protein Sequence:

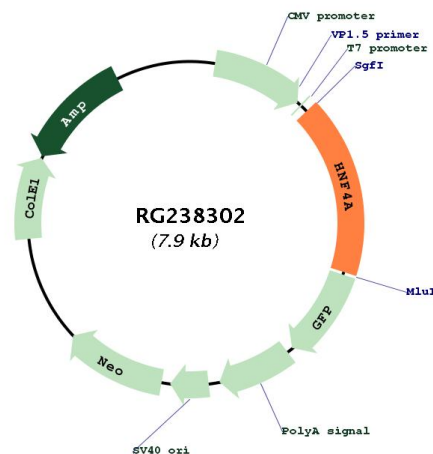
>Peptide sequence encoded by RG238302
 Blue=ORF Red=Cloning site Green=Tag(s)

```
MSDWGQGFQPPDTPSPSEGTNLNAPNSLGVLSALCAICGDRATGKHYGASSCDGCKGFFRRSVRKNHMY
SCRFSRQCVDKDRNQCRYRLKCKFRAGMKKEAVQNERDRISTRSSYEDSSLPSINALLQAEVLSR
QITSPVSGINGDIRAKKIASIADVCEMKEQLLVLEWAKYIPAFCEPLDDQVALLRAHAGEHLLLGA
TKRSMVFKDVLVLLGNDYIVPRHCPPELAEMSRVSIRILDELVLFPQELQIDDNEYAYLKAIIFDPDAKG
LSDPGKIKRLRSQVQVSLEDYINDRQYDSRGRFGELLLLLPTLQSIWQMIQIQIKLFGMAKIDNLL
QEMLLGGSPSDAPHAHPLHPLMQEHMGTNVI VANTMPTHL SNGQMCEWPRPRGQAATPETPQSPPG
GSGSEPYKLLPGAVATIVKPLSAIPQPTITKQEVI
TRTRPLEMESDESGLPAMEIECRITGTLNGVEFELVGGEGTPEQGRMTNKMSTKGALTFSPYLLSHV
MGYGFYHFGTYPSTYENPFLHAINNGGYNTRIEKYEDGGVLHVSFSYRYEAGRVIGDFKVMGTGFPE
SVIFTDKIIRSNAIVEHLHPMGDNDLDGSTRFSLRDGGYSSVVD SHMHFKSAIHPSILQNGGPMFA
FRRVEEDHSNTELGIVEYQHAFKTPDADAGEERV
```

Restriction Sites:

SgfI-MluI

Cloning Scheme:

Plasmid Map:


ACCN: NM_001287183

ORF Size: 1347 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:	<u>NM_001287183.1, NP_001274112.1</u>
RefSeq Size:	4780 bp
RefSeq ORF:	1350 bp
Locus ID:	3172
UniProt ID:	<u>P41235</u>
Cytogenetics:	20q13.12
Protein Families:	Druggable Genome, ES Cell Differentiation/IPS, Nuclear Hormone Receptor, Transcription Factors
Protein Pathways:	Maturity onset diabetes of the young
MW:	50.4 kDa
Gene Summary:	The protein encoded by this gene is a nuclear transcription factor which binds DNA as a homodimer. The encoded protein controls the expression of several genes, including hepatocyte nuclear factor 1 alpha, a transcription factor which regulates the expression of several hepatic genes. This gene may play a role in development of the liver, kidney, and intestines. Mutations in this gene have been associated with monogenic autosomal dominant non-insulin-dependent diabetes mellitus type I. Alternative splicing of this gene results in multiple transcript variants encoding several different isoforms. [provided by RefSeq, Apr 2012]