

Product datasheet for **SC307232**

HNF 4 alpha (HNF4A) (NM_178849) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	HNF 4 alpha (HNF4A) (NM_178849) Human Untagged Clone
Tag:	Tag Free
Symbol:	HNF 4 alpha
Synonyms:	FRTS4; HNF4; HNF4a7; HNF4a8; HNF4a9; HNF4alpha; MODY; MODY1; NR2A1; NR2A21; TCF; TCF-14; TCF14
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)



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Fully Sequenced ORF: >OriGene ORF within SC307232 sequence for NM_178849 edited (data generated by NextGen Sequencing)

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ATGCGACTCTCCAAAACCTCGTCGACATGGACATGGCCGACTACAGTGTGCTGACTGGACCCAGCCTACA
CCACCCTGGAATTTGAGAATGTGCAGGTGTTGACGATGGGCAATGACACGTCCCCATCAGAAGGCCAA
CCTCAACGCGCCCAACAGCCTGGGTGTACGCGCCTGTGTGCCATCTGCGGGGACCGGGCCACGGGCAAA
CACTACGGTGCCTCGAGCTGTGACGGCTGCAAGGGCTTCTCCGGAGGAGCGTCCGGAAGAACCACATGT
ACTCCTGCAGATTTAGCCGGCAGTGCCTGGTGGACAAAGACAAGAGGAACCAAGTGCCTACTGCAGGCT
CAAGAAATGCTTCCGGGCTGGCATGAAGAAGGAAGCCGTCAGAAATGAGCGGGACCGGATCAGCACTCGA
AGGTCAAGCTATGAGGACAGCAGCCTGCCCTCCATCAATGCGCTCCTGCAGGGGAGGTCTGTCCCGAC
AGATCACCTCCCCGCTCCGGGATCAACGGCGACATTCGGGCGAAGAAGATTGCCAGCATCGCAGATGT
GTGTGAGTCCATGAAGGAGCAGCTGCTGGTTCTCGTTGAGTGGGCAAGTACATCCAGCTTTCTGCGAG
CTCCCCCTGGACGACCAGGTGGCCCTGCTCAGAGCCCATGCTGGCGAGCACCTGCTGCTCGGAGCCACCA
AGAGATCCATGGTGTTCAGGACGTGCTGCTCCTAGGCAATGACTACATTGTCCCTCGGCACTGCCCGGA
GCTGGCGGAGATGAGCCGGGTGCCATACGCATCCTTGACGAGCTGGTGTGCCCTCCAGGAGCTGCAG
ATCGATGACAATGAGTATGCCTACCTCAAAGCCATCATCTTCTTTGACCCAGATGCCAAGGGGCTGAGCG
ATCCAGGGAAGATCAAGCGGCTGCGTTCAGGTGCAGGTGAGCTTGGAGGACTACATCAACGACCGCCA
GTATGACTCGCGTGGCCGCTTTGGAGAGCTGCTGCTGCTGCTGCCACCTTGAGAGCATCACCTGGCAG
ATGATCGAGCAGATCCAGTTCATCAAGCTCTTCGGCATGGCCAAGATTGACAACCTGTTGCAGGAGATGC
TGCTGGGAGGGTCCCCAGCGATGCACCCCATGCCACCACCCCTGCACCCTCACCTGATGCAGGAACA
TATGGGAACCAACGTATCGTTGCCAACACAATGCCCACTCACCTCAGCAACGGACAGATGTCCACCCCT
GAGACCCACAGCCCTCACCGCCAGGTGGCTCAGGGTCTGAGCCCTATAAGCTCCTGCCGGGAGCCGCTCG
CCACAATCGTCAAGCCCCTCTGCCATCCCCAGCCGACCATACCAAGCAGGAAGTTATCTAG
    
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Clone variation with respect to NM_178849.2

Restriction Sites: Please inquire

ACCN: NM_178849

Insert Size: 1400 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: The ORF of this clone has been fully sequenced and found to be a perfect match to NM_178849.1.

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_178849.1](#), [NP_849180.1](#)

RefSeq Size: 4707 bp

RefSeq ORF: 1395 bp

Locus ID: 3172

Cytogenetics: 20q13.12

Protein Families: Druggable Genome, ES Cell Differentiation/IPS, Nuclear Hormone Receptor, Transcription Factors

Protein Pathways: Maturity onset diabetes of the young

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]

Transcript Variant: This variant (1) uses an alternate in-frame donor splice site in the 3' coding region compared to variant 2. The resulting shorter isoform (1, also known as HNF4alpha1) lacks a 10 aa protein segment compared to isoform 2. Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.