OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Product datasheet for RC238302

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:	Myc-DDK
Symbol:	HNF 4 alpha
Synonyms:	FRTS4; HNF4; HNF4a7; HNF4a8; HNF4a9; HNF4alpha; MODY; MODY1; NR2A1; NR2A21; TCF; TCF-14; TCF14
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

This product is to be used for laboratory only. Not for diagnostic or therapeutic use.
©2023 OriGene Technologies, Inc., 9620 Medical Center Drive, Ste 200, Rockville, MD 20850, US

ORF Nucleotide Sequence:

>RC238302 representing NM_001287183
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGTCGGACTGGGGCCAGGGCTTCCCCCAGGACCCACCAGACACGTCCCCATCAGAAGGCACCAACCTCA
ACGCGCCCAACAGCCTGGGTGTCAGCGCCCTGTGTGCCATCTGCGGGGACCGGGCCACGGGCAAACACTA
CGGTGCCTCGAGCTGTGACGGCTGCAAGGGCTTCTTCCGGAGGAGCGTGCGGAAGAACCACATGTACTCC
TGCAGATTTAGCCGGCAGTGCGTGGTGGACAAAGACAAGAGGAACCAGTGCCGCTACTGCAGGCTCAAGA
AATGCTTCCGGGCTGGCATGAAGAAGGAAGCCGTCCAGAATGAGCGGGACCGGATCAGCACTCGAAGGTC
AAGCTATGAGGACAGCAGCCTGCCCTCCATCAATGCGCTCCTGCAGGCGGAGGTCCTGTCCCGACAGATC
ACCTCCCCCGTCTCCGGGATCAACGGCGACATTCGGGCGAAGAAGATTGCCAGCATCGCAGATGTGTGTG
AGTCCATGAAGGAGCAGCTGCTGGTTCTCGTTGAGTGGGCCAAGTACATCCCAGCTTTCTGCGAGCTCCC
CCTGGACGACCAGGTGGCCCTGCTCAGAGCCCATGCTGGCGAGCACCTGCTGCTCGGAGCCACCAAGAGA
TCCATGGTGTTCAAGGACGTGCTGCTCCTAGGCAATGACTACATTGTCCCTCGGCACTGCCCGGAGCTGG
CGGAGATGAGCCGGGTGTCCATACGCATCCTTGACGAGCTGGTGCTGCCCTTCCAGGAGCTGCAGATCGA
TGACAATGAGTATGCCTACCTCAAAGCCATCATCTTCTTTGACCCAGATGCCAAGGGGCTGAGCGATCCA
GGGAAGATCAAGCGGCTGCGTTCCCAGGTGCAGGTGAGCTTGGAGGACTACATCAACGACCGCCAGTATG
ACTCGCGTGGCCGCTTTGGAGAGCTGCTGCTGCTGCTGCCCACCTTGCAGAGCATCACCTGGCAGATGAT
CGAGCAGATCCAGTTCATCAAGCTCTTCGGCATGGCCAAGATTGACAACCTGTTGCAGGAGATGCTGCTG
GGAGGGTCCCCCAGCGATGCACCCCATGCCCACCACCCCCTGCACCCTCACCTGATGCAGGAACATATGG
GAACCAACGTCATCGTTGCCAACACAATGCCCACTCACCTCAGCAACGGACAGATGTGTGAGTGGCCCCG
ACCCAGGGGACAGGCAGCCACCCCTGAGACCCCACAGCCCTCACCGCCAGGTGGCTCAGGGTCTGAGCCC
TATAAGCTCCTGCCGGGAGCCGTCGCCACAATCGTCAAGCCCCTCTCTGCCATCCCCCAGCCGACCATCA
CCAAGCAGGAAGTTATC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC238302 representing NM_001287183
Red=Cloning site Green=Tags(s)

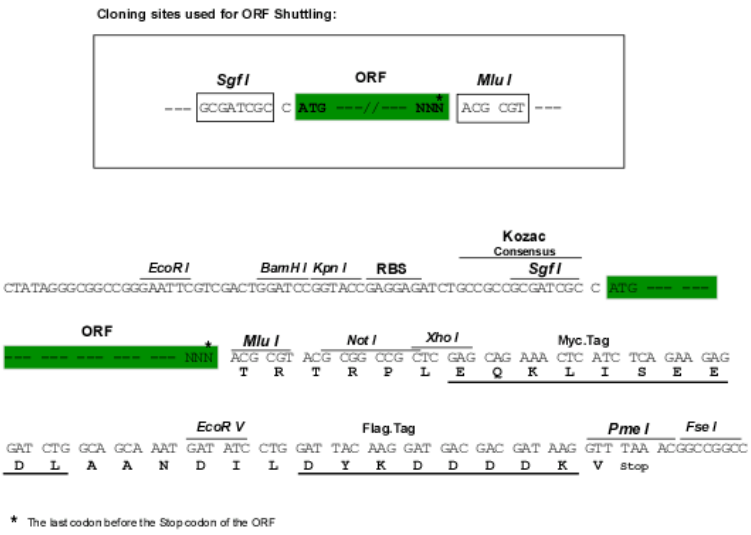
MSDWGQGFPQDPPDTSPSEGTNLNAPNSLGVSALCAICGDRATGKHYGASSCDGCKGFFRRSVRKNHMYS
CRFSRQCVVDKDKRNQCRYCRLKKCFRAGMKKEAVQNERDRISTRRSSYEDSSLPSINALLQAEVLSRQI
TSPVSGINGDIRAKKIASIADVCESMKEQLLVLVEWAKYIPAFCELPLDDQVALLRAHAGEHLLLGATKR
SMVFKDVLLLGNDYIVPRHCPELAEMSRVSIRILDELVLPFQELQIDDNEYAYLKAIIFFDPDAKGLSDP
GKIKRLRSQVQVSLEDYINDRQYDSRGRFGELLLLLPTLQSITWQMIEQIQFIKLFGMAKIDNLLQEMLL
GGSPSDAPHAHHPLHPHLMQEHMGTNVIVANTMPTHLSNGQMCEWPRPRGQAATPETPQPSPPGGSGSEP
YKLLPGAVATIVKPLSAIPQPTITKQEVI

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI

This product is to be used for laboratory only. Not for diagnostic or therapeutic use.
©2023 OriGene Technologies, Inc., 9620 Medical Center Drive, Ste 200, Rockville, MD 20850, US

Cloning Scheme:



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).

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_001287183.1, NP_001274112.1

RefSeq Size: 4780 bp

RefSeq ORF: 1350 bp

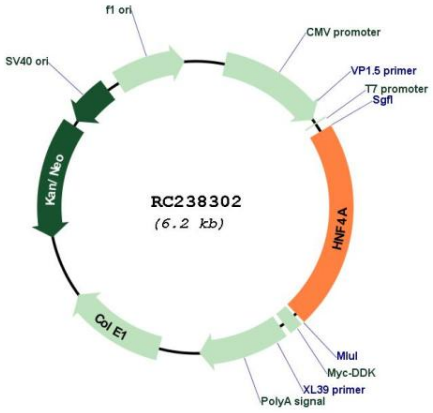
Locus ID: 3172

UniProt ID: P41235

This product is to be used for laboratory only. Not for diagnostic or therapeutic use.
©2023 OriGene Technologies, Inc., 9620 Medical Center Drive, Ste 200, Rockville, MD 20850, US

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]

Product images:



Circular map for RC238302

This product is to be used for laboratory only. Not for diagnostic or therapeutic use.
©2023 OriGene Technologies, Inc., 9620 Medical Center Drive, Ste 200, Rockville, MD 20850, US