

Product datasheet for **RC211408**

FOXA2 (NM_153675) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	FOXA2 (NM_153675) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	FOXA2
Synonyms:	HNF-3-beta; HNF3B; TCF3B
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>RC211408 representing NM_153675
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGCTGGGAGCGGTGAAGATGGAAGGGCACGAGCCGTCGACTGGAGCAGCTACTATGCAGAGCCCGAGG
 GCTACTCCTCCGTGAGCAACATGAACGCCGGCCTGGGGATGAACGCATGAACACGTACATGAGCATGTC
 GGCGGCCCATGGGAGCGGCTCGGGCAACATGAGCGCGGGCTCCATGAACATGTCGTCGTACGTGGG
 GCTGGCATGAGCCGTCCTGGCGGGATGTCCCCGGCGGGCGCCATGGCGGCATGGGCGGCTCGG
 CCGGGGCGGCTGGCGTGGCGGGCATGGGCGCCTTGTAGTCCCAGCCTGAGCCCGCTCGGGGGCAGGC
 GGCCGGGGCCATGGGCGGCTGGCCCCCTACGCCAACATGAACTCCATGAGCCCCATGTACGGGCAGGGC
 GGCTGAGCCGCGCCCGACCCCAAGACCTACAGGCGCAGCTACACGCACGCAAAGCCGCCCTACTCGT
 ACATCTCGCTCATACCATGGCCATCCAGCAGAGCCCCAACAAAGATGCTGACGCTGAGCGAGATCTACCA
 GTGGATCATGGACCTTCCCCCTTCTACCGGCAGAACAGCAGCGCTGGCAGAACTCCATCCGCCACTCG
 CTCTCCTCAACGACTGTTTCTGAAGGTGCCCGCTCGCCCACAAGCCCGGCAAGGGCTCCTTCTGGA
 CCCTGCACCCGACTCGGGCAACATGTTTCGAGAACGGCTGCTACCTGCGCCGCCAGAAGCGCTTCAAGT
 CGAGAAGCAGCTGGCGTGAAGGAGGCCGAGGCGCCGCCGCGCAGCGGCAAGAAGCGGGCCCGGGGCC
 CAGGCCTCACAGGCTCAACTCGGGGAGGCCGCGGGCCGCGCTCCGAGACTCCGGCGGGCACCGAGTCCG
 CTCCTCGAGCGCCTCCCCGTGCCAGGAGCACAAAGCGAGGGGGCTGGGAGAGCTGAAGGGGACCGCCGC
 TGCGGCGCTGAGCCCCCAGAGCCGGCGCCCTCTCCGGGCGAGCAGCAGCAGGCCGCGGCCACCTGCTG
 GGCCCGCCCCACCACCGGGCTGCCGCTGAGGCCACCTGAAGCCGGAACACCACTACGCCTTCAACC
 ACCCGTTTCCATCAACAACCTCATGTCTCGGAGCAGCAGCACCACACAGCCACCACCACCAGCC
 CCACAAAATGGACCTCAAGGCCACGAACAGGTGATGCACTACCCCGGCTACGGTTCCTCCCATGCCTGGC
 AGCTTGCCATGGGCCCGGTACGAACAAAACGGGCTGGACGCTCGCCCTGGCCGAGATACCTCCT
 ACTACCAGGGGTGACTCCCGCCATTATGAACTCCTCT

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC211408 representing NM_153675
 Red=Cloning site Green=Tags(s)

MLGAVKMEGHEPSDWSSYYAEPEGYSSVSNMAGLGMNGMNTYMSMSAAAMGSGSGNMSAGSMNMSYVVG
 AGMSPSLAGMSPGAGAMAGMGSAGAAGVAGMGPPLSPSLSPGGQAAGAMGGLAPYANMNSMSPMYGQA
 GLSRARDPKTYRRSYTHAKPPYSYISLITMAIQSPNKMLTLEIYQWIMDLFPFYRQNRQWQNSIRHS
 LSFNDCFLKVPSPDKPGKGSFWTLHPDSGNMFENGCYLRRQKRFKCEKQLALKEAAGAAGSGKAAAGA
 QASQAQLGEAAGPASETAPGTESPHSSASPCQEHKRGGLGELKGTAAAALSPPEPAPSPGQQQAAAHL
 GPPHPGLPPEAHLKPEHHYAFNHPFSINLMSSEQQHSHSHHHQPHKMDLKAYEQVMHYPGYSPMPG
 SLAMGPVTNKTGLDASPLAADTSYYQGVSRPIMNSS

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mg2722_c05.zip

Restriction Sites:

Sgfl-MluI

Cloning Scheme:


ACCN: NM_153675

ORF Size: 1371 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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_153675.3](#)

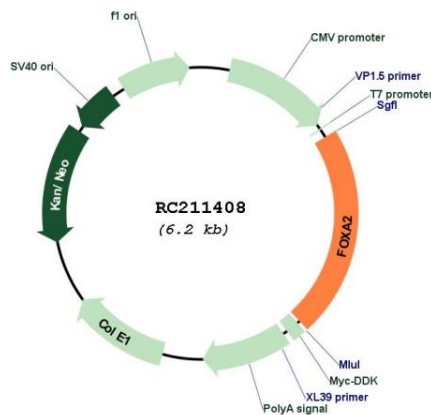
RefSeq Size: 2230 bp

RefSeq ORF: 1374 bp

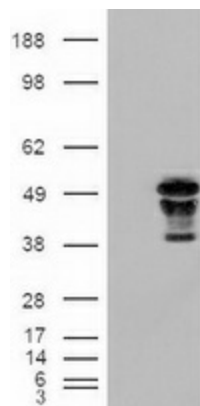
Locus ID: 3170

UniProt ID: [Q9Y261](#)
Cytogenetics: 20p11.21
Protein Families: Embryonic stem cells, ES Cell Differentiation/IPS, Induced pluripotent stem cells, Transcription Factors
Protein Pathways: Maturity onset diabetes of the young
MW: 48.1 kDa
Gene Summary: This gene encodes a member of the forkhead class of DNA-binding proteins. These hepatocyte nuclear factors are transcriptional activators for liver-specific genes such as albumin and transthyretin, and they also interact with chromatin. Similar family members in mice have roles in the regulation of metabolism and in the differentiation of the pancreas and liver. This gene has been linked to sporadic cases of maturity-onset diabetes of the young. Transcript variants encoding different isoforms have been identified for this gene. [provided by RefSeq, Oct 2008]

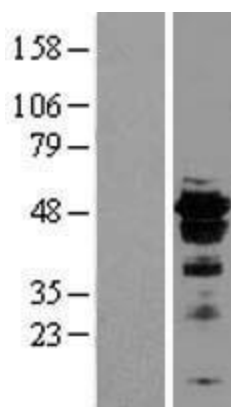
Product images:



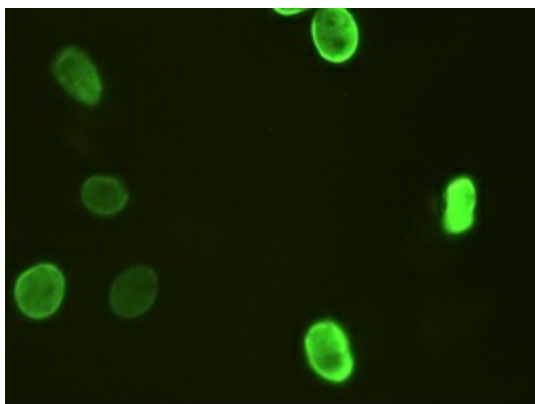
Circular map for RC211408



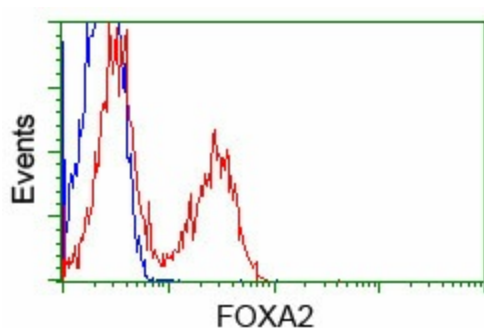
HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY FOXA2 (Cat# RC211408, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-FOXA2 (Cat# [TA500073]). Positive lysates [LY407005] (100ug) and [LC407005] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY407005]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC211408 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Anti-FOXA2 mouse monoclonal antibody ([TA500073]) immunofluorescent staining of HeLa cells transiently transfected by pCMV6-ENTRY FOXA2 (RC211408)



HEK293T cells transfected with either pCMV6-ENTRY FOXA2 (RC211408) (Red) or empty vector control plasmid (Blue) were immunostained with anti-FOXA2 mouse monoclonal ([TA500073], Dilution 1:1,000), and then analyzed by flow cytometry.