

Product datasheet for **RC223412**

FOXC2 (NM_005251) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	FOXC2 (NM_005251) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	FOXC2
Synonyms:	FKHL14; LD; MFH-1; MFH1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>RC223412 representing NM_005251
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**GCGATCGCC**

ATGACAGGCGCGCTACTCCGTGTCCGACCCCAACGCCTGGGAGTGGTGCCTACCTGAGCGAGCAGAATT
 ACTACCGGGCTGCGGGCAGCTACGGCGGCATGGCCAGCCCATGGGCGTCTATTCCGGCCACCCGGAGCA
 GTACAGCGCGGGGATGGGCCGCTCTACGCGCCCTACCACCACCAGCCCGCGGCCTAAGGACCTG
 GTGAAGCCGCCCTACAGCTACATCGCGCTCATCACCATGGCCATCCAGAACGCGCCCGAGAAGAAGATCA
 CCTTGAACGGCATCTACCAGTTCATCATGGACCCTTCCCCTTCTACGGGAGAACAAGCAGGGCTGGCA
 GAACAGCATCCGCCACAACCTCTCGCTCAACGAGTGCTTCGTCAAGGTGCCCCGCGACGACAAGAAGCCC
 GGCAAGGGCAGTTACTGGACCCTGGACCAGGACTCCTACAACATGTTGAGAACGGCAGCTTCTGCGGC
 GCCGGCGCGCTTCAAAAAGAAGGACGTGTCAAGGAGAAGGAGGAGCGGGCCACCTCAAGGAGCCGCC
 CCCGGCGCGCTCAAGGGCGCCCGGCCACCCCCACCTAGCGGACGCCCAAGGAGCCGAGAAGAAG
 GTGGTGATCAAGAGCGAGGCGGGCTCCCGGGCGTGCCTGATCACCAGGTGGAGACGCTGAGCCCCG
 AGAGCGCGCTGCAGGGCAGCCCGCGCAGCGCGGCTCCACGCCCGCCGGCTCCCCGACGGCTCGTGCC
 GGAGCACACGCCGCGCGCCCAACGGGCTGCCTGGCTTACGCGTGGAGAACATCATGACCTGCGAACG
 TCGCCCGCGGGCGAGAGCTGAGCCCGGGGCGGACGCGCGGGCCTGGTGGTCCGCGCGCTGGCGCTGC
 CCTACGCCCGCGCGCCCGCCCGCCTACGGCCAGCGTGCCTCAGGGCTGGAGGCGGGGCGCCGG
 GGGCTACCAGTGCAGCATGCGAGCGATGAGCCTGTACCCGGGGCCGAGCGGCGCGCACATGTGCGTC
 CCGCCCGCCCTGGACGAGGCCCTCTCGGACCACCCGAGCGGCCACACACCAGCACCGGCCACCCACCC
 TCGCCCGCGCCAGGAGGGCGCGCTCGCCGCCACGGGCCACCCACACCAGCACCGGCCACCCACCCACCC
 GCAGGCGCCGCCGCCCGCCGGCTCCCGGCCAGCCGACGCCGACGCCCGGGGCGCGCGCGCGCAG
 GCGGCCTCCTGGTATCTCAACCACAGCGGGACCTGAACCACCTCCCGGCCACAGTTCGCGGCCACG
 AGCAAACCTTCCCAACGTGCGGGAGATGTTCAACTCCCACCGGCTGGGGATTGAGAACTCGACCCTCGG
 GGAGTCCAGGTGAGTGGCAATGCCAGCTGCCAGTGCCTACAGATCCAGCGCGCTCTCTATCGCCAC
 GCAGCCCCCTACTCTACGACTGCACGAAATAC

ACGCGTACGCGGGCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC223412 representing NM_005251
 Red=Cloning site Green=Tags(s)

MQARYSVSDPNALGVVPYLSEQNYRAAGSYGGMASPMGVYSGHPEQYSAGMGRSYAPYHHHQPAAPKDL
 VKPPYSYIALITMAIQNAPEKKITLNGIYQFIMDRFPFYRENKQGWQNSIRHNLSLNECFVKVPRDDKKP
 GKGSYWTLDPDSYNMFENGSLRRRRRFKKKDVSKKEERAHLKEPPPAASKGAPATPHLADAPKEAEKK
 VVIKSEAASPALPVITKVELSPESALQGSRAASTPAGSPDGLPEHHAAAPNGLPGFSVENIMTLRT
 SPPGGELSPGAGRAGLVVPLALPYAAAPPAAYGQPCAQGLEAGAAGGYQCSMRAMSLYTGAEPAHMCV
 PPALDEALSDHPSGPTSPLSALNLAAGQEGALAAATGHHHQHHGHHHPQAPPPPPAPQPQTPQPGAAAAQ
 AASWYLNHSGDLNHLPGHTFAAQQTFFPNVREMFNSHRLGIENSTLGEQVSGNASCQLPYRSTPPLYRH
 AAPYSYDCTKY

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mg2583_b01.zip

Restriction Sites:

Sgfl-Mlul

Cloning Scheme:


ACCN: NM_005251

ORF Size: 1503 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_005251.3](#)

RefSeq Size: 1506 bp

RefSeq ORF: 1506 bp

Locus ID: 2303

UniProt ID: [Q99958](#)

Cytogenetics: 16q24.1

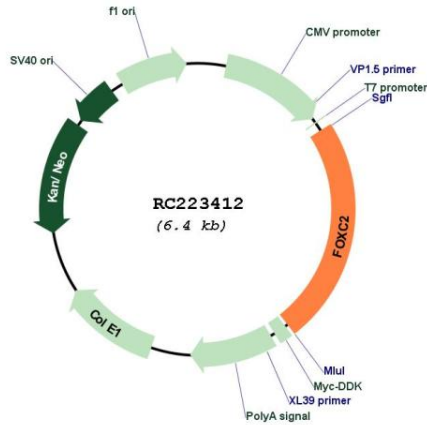
Domains: FH

Protein Families: Druggable Genome, Transcription Factors

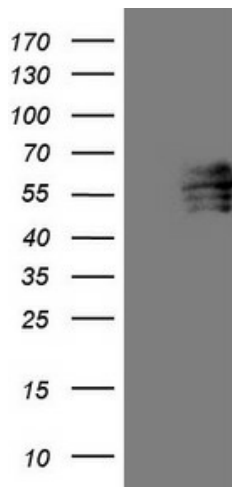
MW: 53.5 kDa

Gene Summary: This gene belongs to the forkhead family of transcription factors which is characterized by a distinct DNA-binding forkhead domain. The specific function of this gene has not yet been determined; however, it may play a role in the development of mesenchymal tissues. [provided by RefSeq, Jul 2008]

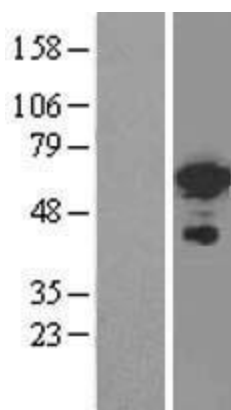
Product images:



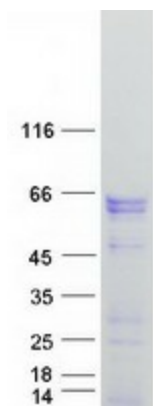
Circular map for RC223412



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY FOXC2 (Cat# RC223412, 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-FOXC2 (Cat# [TA807700])(1:500). Positive lysates [LY401613] (100ug) and [LC401613] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY401613]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC223412 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified FOXC2 protein (Cat# [TP323412]). The protein was produced from HEK293T cells transfected with FOXC2 cDNA clone (Cat# RC223412) using MegaTran 2.0 (Cat# [TT210002]).