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Product datasheet for RC213185

FOXO4 (NM_005938) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	FOXO4 (NM_005938) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	FOXO4
Synonyms:	AFX; AFX1; MLLT7
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>RC213185 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGATCCGGGGAATGAGAATTCAGCCACAGAGGCTGCCGCGATCATAGACCTAGATCCCGACTTCGAAC
CCCAGAGCCGTCCCCGCTCCTGCACCTGGCCCCTTCCCCGACCAGAGATCGCTAACCAGCCGTCCGAGCC
GCCCGAGGTGGAGCCAGATCTGGGGGAAAAGGTACACACGGAGGGGCGCTCAGAGCCGATCCTGTTGCCC
TCTCGGCTCCCAGAGCCGGCCGGGGGCCCCCAGCCCGGAATCCTGGGGGCTGTAACAGGTCCTCGGAAGG
GAGGCTCCCGCCGGAATGCCTGGGGAAATCAGTCATATGCAGAACTCATCAGCCAGGCCATTGAAAGCGC
CCCGGAGAAGCGACTGACACTTGCCCAGATCTACGAGTGGATGGTCCGTACTGTACCCTACTTCAAGGAC
AAGGGTGACAGCAACAGCTCAGCAGGATGGAAGAACTCGATCCGCCACAACCTGTCCCTGCACAGCAAGT
TCATCAAGGTTCACAACGAGGCCACCGGCAAAAGCTCTTGGTGGATGCTGAACCCTGAGGGAGGCAAGAG
CGGCAAAGCCCCCCGCCGCCGGGCCGCCTCCATGGATAGCAGCAGCAAGCTGCTCCGGGGCCGCAGTAAA
GCCCCCAAGAAGAAACCATCTGTGCTGCCAGCTCCACCCGAAGGTGCCACTCCAACGAGCCCTGTCGGCC
ACTTTGCCAAGTGGTCAGGCAGCCCTTGCTCTCGAAACCGTGAAGAAGCCGATATGTGGACCACCTTCCG
TCCACGAAGCAGTTCAAATGCCAGCAGTGTCAGCACCCGGCTGTCCCCCTTGAGGCCAGAGTCTGAGGTG
CTGGCGGAGGAAATACCAGCTTCAGTCAGCAGTTATGCAGGGGGTGTCCCTCCCACCCTCAATGAAGGTC
TAGAGCTGTTAGATGGGCTCAATCTCACCTCTTCCCATTCCCTGCTATCTCGGAGTGGTCTCTCTGGCTT
CTCTTTGCAGCATCCTGGGGTTACCGGCCCCTTACACACCTACAGCAGCTCCCTTTTCAGCCCAGCAGAG
GGGCCCCTGTCAGCAGGAGAAGGGTGCTTCTCCAGCTCCCAGGCTCTGGAGGCCCTGCTCACCTCTGATA
CGCCACCACCCCCTGCTGACGTCCTCATGACCCAGGTAGATCCCATTCTGTCCCAGGCTCCGACTCTTCT
GTTGCTGGGGGGGCTTCCTTCCTCCAGTAAGCTGGCCACGGGCGTCGGCCTGTGTCCCAAGCCCCTAGAG
GCTCCAGGCCCCAGCAGTCTGGTTCCCACCCTTTCTATGATAGCACCACCTCCAGTCATGGCAAGTGCCC
CCATCCCCAAGGCTCTGGGGACTCCTGTGCTCACACCCCCTACTGAAGCTGCAAGCCAAGACAGAATGCC
TCAGGATCTAGATCTTGATATGTATATGGAGAACCTGGAGTGTGACATGGATAACATCATCAGTGACCTC
ATGGATGAGGGCGAGGGACTGGACTTCAACTTTGAGCCAGATCCC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC213185 protein sequence
Red=Cloning site Green=Tags(s)

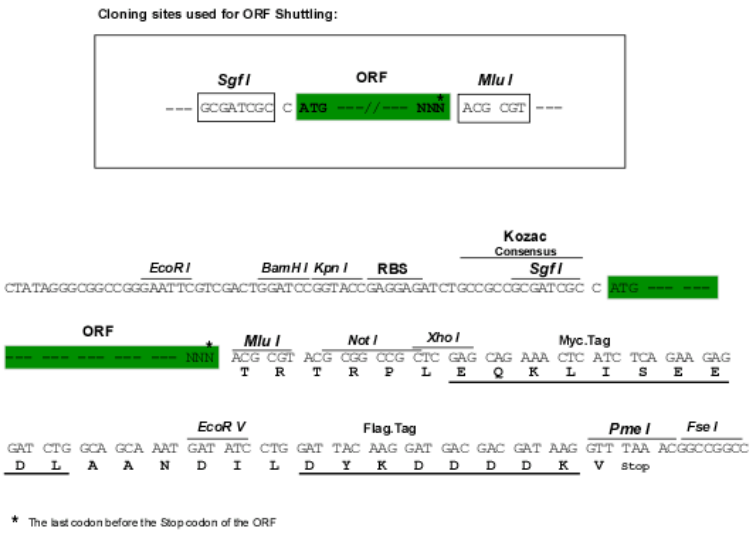
MDPGNENSATEAAAIIDLDPDFEPQSRPRSCTWPLPRPEIANQPSEPPEVEPDLGEKVHTEGRSEPILLP
SRLPEPAGGPQPGILGAVTGPRKGGSRRNAWGNQSYAELISQAIESAPEKRLTLAQIYEWMVRTVPYFKD
KGDSNSSAGWKNSIRHNLSLHSKFIKVHNEATGKSSWWMLNPEGGKSGKAPRRRAASMDSSSKLLRGRSK
APKKKPSVLPAPPEGATPTSPVGHFAKWSGSPCSRNREEADMWTTFRPRSSSNASSVSTRLSPLRPESEV
LAEEIPASVSSYAGGVPPTLNEGLELLDGLNLTSSHSLLSRSGLSGFSLQHPGVTGPLHTYSSSLFSPAE
GPLSAGEGCFSSSQALEALLTSDTPPPPADVLMTQVDPILSQAPTLLLLGGLPSSSKLATGVGLCPKPLE
APGPSSLVPTLSMIAPPPVMASAPIPKALGTPVLTPPTEAASQDRMPQDLDLDMYMENLECDMDNIISDL
MDEGEGLDFNFEPDP

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6158_h05.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_005938

ORF Size: 1515 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: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

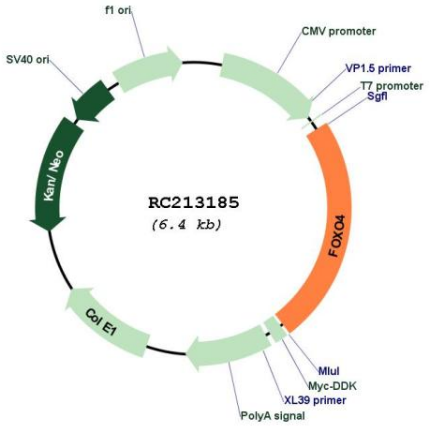
Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method:

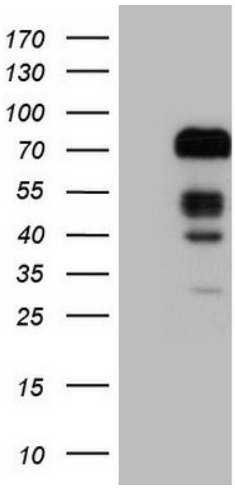
1. Centrifuge at 5,000xg for 5min.
2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
5. Store 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_005938.4
RefSeq Size:	3365 bp
RefSeq ORF:	1518 bp
Locus ID:	4303
UniProt ID:	P98177
Cytogenetics:	Xq13.1
Domains:	FH
Protein Families:	Transcription Factors
MW:	53.7 kDa
Gene Summary:	This gene encodes a member of the O class of winged helix/forkhead transcription factor family. Proteins encoded by this class are regulated by factors involved in growth and differentiation indicating they play a role in these processes. A translocation involving this gene on chromosome X and the homolog of the Drosophila trithorax gene, encoding a DNA binding protein, located on chromosome 11 is associated with leukemia. Multiple transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jan 2010]

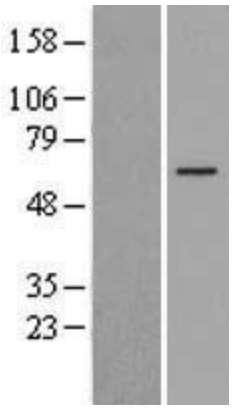
Product images:



Circular map for RC213185



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY FOXO4 (Cat# RC213185, 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-FOXO4 (Cat# [TA808579])(1:2000). Positive lysates [LY401798] (100ug) and [LC401798] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY401798]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC213185 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).