

Product datasheet for **RC207964**

FOXG1 (NM_005249) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	FOXG1 (NM_005249) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	FOXG1
Synonyms:	BF1; BF2; FHKL3; FKH2; FKHL1; FKHL2; FKHL3; FKHL4; FOXG1A; FOXG1B; FOXG1C; HBF-1; HBF-2; HBF-3; HBF-G2; HBF2; HFK1; HFK2; HFK3; KHL2; QIN
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>RC207964 representing NM_005249
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGCTGGACATGGGAGATAGGAAAGAGGTGAAAATGATCCCCAAGTCCTCGTTCCAGCATCAACAGCCTGG
 TGCCCGAGGGCGGTCCAGAACGACAACCACCACGGGAGCCACGGCCACCACAACAGCCACCACCCAGCA
 CCACCACCACCACCACCACCATACCACCACCCCGCCGCCGCCCGCCCGCAACCCGCCCGCCGCCCGCAG
 CAGCAGACGGCC
 ACGACGACAAGGGCCCCAGCAGCTGCTGCTCCCGCCGCCACCAGCCACCACCCGCCGCCGCCCTGGA
 CGGGGCTAAAGCGGTGGGGTGGGCGCAAGGGCGAGCCGGGCGGGCGGGGAGCTGGCGCCCGTC
 GGGCCGGACGAGAAGGAGAAGGGCGCCGCCGCCGGGGGGAGGAGAAGAAGGGGGCGGGCGAGGGCGGCA
 AGGACGGGAGGGGGCAAGGAGGGCGAGAAGAAGCAAGTACGAGAAGCCCGCTTACGCTACAA
 CGCGCTCATCATGATGGCCATCCGGCAGAGCCCCGAGAAGCGGCTCACGCTCAACGGCATCTACGAGTTC
 ATCATGAAGAACTTCCTTACTACCGCAGAAACAGCAGGGCTGGCAGAATCCATCCGCCACAATCTGT
 CCCTCAACATGTCTTCGTGAAGGTGCCGCGCCACTACGACGACCCGGGCAAGGGCAACTACTGGATGCT
 GGACCCGTCGAGCGACGACGTGTTATCGGCGGCACCACGGGCAAGCTGCGGCGCCGCTCCACCACCTCG
 CGGGCCAAGCTGGCCTTCAAGCGCGGTGCGCGCCTCACCTCCACCGGCCTCACCTTATGGACCGCGCCG
 GCTCCCTCTACTGGCCATGTCGCCCTTCTGTCCCTGCACCACCCCGCCAGCAGCACTTTGAGTTA
 CAACGGCACCACGTCGGCCTACCCAGCCACCCATGCCCTACAGCTCCGTGTTGACTCAGAATCGCTG
 GGCAACAACCACTCCTTCTCCACCGCAACGGCCTGAGCGTGGACCGGCTGGTCAACGGGGAGATCCCGT
 ACGCCACGACCACCTCACGGCCGCCGCTAGCCGCTCGGTGCCCTGCGGCCTGCGCTC
 TGGGACTACTCCCTCAACCCCTGCTCCGTC AACCTGCTCGGGGCCAGACCAGTTACTTTTTCCCCAC
 GTCCCGCACCCGTCAATGACTTCGACAGCAGCAGTCCATGAGCGCCAGGGCCACGTCCTCCTCCACGT
 CGCCCGAGGCCCTCGACCCTGCCCTGTGAGTCTTAAAGACCCTCTTTGCCAAGTTTTACGACGGGACT
 GTCTGGGGGACTGTCTGATTATTTACACATCAAATCAGGGGTCTTCTTCAACCCTTAATACAT

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC207964 representing NM_005249
 Red=Cloning site Green=Tags(s)

MLDMGDRKEVKMIPKSSFINSLVPEAVQNDNHASHGHHNSHHPQHSHHHHHHHHHPPPPAPQPPPPQ
 QQPPPPPPPPAPQPPQTRGAPAAADDKGPQQLLLPPPPPPPPAAALDGAKAVGLGGKGEPPGGPGE
 LAPVGPDEKEKGAGAGGEEKGAGEGGKDGEGGKEGEKNGKYEKPPFSYNALIMMAIRQSPEKRLTLNGIYEF
 IMKNFPYRENKQGWQNSIRHNLNLMCFVKVPRHYDDPGKGNWMLDPSSDDVFIGGTTGKLRRTSTTS
 RAKLAFKRGARLTSTGLTFMDRAGSLYWPMSFSLHHPRASSTLSYNGTTSAYPSHPMPYSSVLQNSL
 GNNHSFSTANGLSVDRLVNGEIPYATHHLTAAALAASVPCGLSVPCSGTYSLNPCSVNLLAGQTSYFFPH
 VPHPSMTSQSSTSMSARATSSSTSPQAPSTLPCESLRPSLPSFTTGLSGGLSDYFTHQNQGSSENPLIH

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mg3024_b01.zip

Restriction Sites:

Sgfl-MluI

Cloning Scheme:


ACCN: NM_005249

ORF Size: 1467 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_005249.5](#)

RefSeq Size: 2600 bp

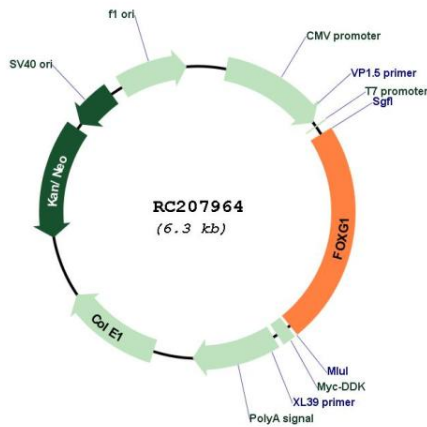
RefSeq ORF: 1470 bp

Locus ID: 2290

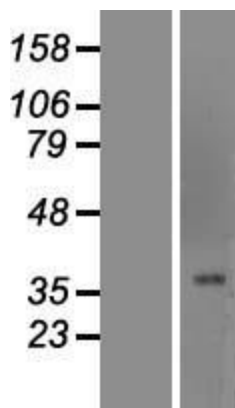
UniProt ID: [P55316](#)
Cytogenetics: 14q12
Domains: FH
Protein Families: Druggable Genome, Transcription Factors
MW: 52.2 kDa
Gene Summary:

This locus encodes a member of the fork-head transcription factor family. The encoded protein, which functions as a transcriptional repressor, is highly expressed in neural tissues during brain development. Mutations at this locus have been associated with Rett syndrome and a diverse spectrum of neurodevelopmental disorders defined as part of the FOXG1 syndrome. This gene is dysregulated in many types of cancer and is the target of multiple microRNAs that regulate the proliferation of tumor cells. [provided by RefSeq, Jul 2020]

Product images:



Circular map for RC207964



Western blot validation of overexpression lysate (Cat# [LY417422]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC207964 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).