

## Product datasheet for **RC215629**

### **FOXC1 (NM\_001453) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	FOXC1 (NM_001453) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	FOXC1
Synonyms:	ARA; ASGD3; FKHL7; FREAC-3; FREAC3; IGDA; IHG1; IRID1; RIEG3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**ORF Nucleotide Sequence:**

>RC215629 representing NM\_001453  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGCAGGCGCGCTACTCCGTGTCCAGCCCCAACTCCCTGGGAGTGGTGCCTACCTCGGCGGCGAGCAGA  
 GCTACTACCGCGCGGCCGCGCGCGGGGCGGCTACACCGCCATGCCGGCCCCATGAGCGTGTA  
 CTCGCACCTGCGCACGCCGAGCAGTACCCGGGCGGCATGGCCCGCCTACGGGCCCTACACGCCGCAG  
 CCGCAGCCCAAGGACATGGTGAAGCCGCCCTATAGCTACATCGCGCTCATCACCATGGCCATCCAGAACG  
 CCCCAGACAAGAAGATCACCTGAACGGCATCTACCAGTTCATCATGGACCGTTCCTTCTACCGGGA  
 CAACAAGCAGGGTGGCAGAACAGCATCCGCCACAACCTCTCGCTCAACGAGTGTTCGTCGAAGTGCCG  
 CGCGACGACAAGAAGCCGGGCAAGGGCAGCTACTGGACGCTGGACCCGGACTCCTACAACATGTTGAGA  
 ACGGCAGCTTCTGCGGCGCGCGCGCTTCAAGAAGAAGGACCGGTGAAGGACAAGGAGGAGAAGGA  
 CAGGCTGCACCTCAAGGAGCCGCCCGCCCGCGCCAGCCCCGCGCCGCGCGCGGAGCAGGCCGAC  
 GGCAACGCGCCCCGTCCGCAGCCGCCCGCGTGCATCCAGGACATCAAGACCGAGAACGGTACGTGCC  
 CCTCGCCGCCAGCCCTGTCCCGGCGCGCCCTGGGAGCGGCAGCGCCGCGCGGTGCCAAGAT  
 CGAGAGCCCCGACAGCAGCAGCAGCAGCCTGTCCAGCGGGAGCAGCCCCCGGGCAGCCTGCCGTCGGCG  
 CGGCCGCTCAGCCTGGACGGTGCAGATTCCGCGCCGCGCGCCCGCGCCCTCCGCCCGCGCGCACC  
 ATAGCCAGGGTTCAGCGTGGACAACATCATGACGTCGCTGCGGGGTGCGCCGAGAGCGCGCGCGGA  
 GCTCAGCTCCGGCCTTCTGGCCTCGGCGCGCGCTCCTCGCGCGGGGATCGCACCCCCGCTGGCGCTC  
 GGCGCTACTCGCCCGCCAGAGCTCCCTCTACAGTCCCCCTGCAGCCAGACCTCCAGCGCGGGCAGCT  
 CGGCGCGCGCGCGCGCGCGCGGGGCGCGGGGCGCGGGGCGCGGGGACCTACCACTGCAACT  
 GCAAGCCATGAGCCTGTACGCGGCCGCGGAGCGCGGGGGCACTTGCAGGGCGCGCCCGGGGCGCGGGC  
 GGCTCGGCCGTGGACGACCCCTGCCGACTACTCTGCTCCGGTACCAGCAGCAGCTCGTCTGCC  
 TGAGTACGCGCGCGCGCGCGCGCGGGGAGGCCAGGAGCGCGCCACCACCCTGCGGCCACCA  
 AGGCCGCTCACCTCGTGTACCTGAACCAGCGGGCGGAGACCTGGGCCACTTGGCGAGCGCGCGCGG  
 GCGGGCGCGCGCGCAGGCTACCCGGCCAGCAGCAGAATTCCACTCGGTGCGGGAGATGTTGAGTAC  
 AGAGGATCGGCTGAACAACTCTCCAGTGAACGGGAATAGTAGTGTCAAATGGCCTTCCCTCCAGCCA  
 GTCTGTACCGCAGTCCGGAGCTTTCGTCTACGACTGTAGCAAGTTT

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>RC215629 representing NM\_001453  
 Red=Cloning site Green=Tags(s)

MQARYSVSSPNSLGVVPYLGGEQSYRAAAAAAGGGYTAMPAPMSVYSHPAHAEQYPGGMARAYGPYTPQ  
 PQPKDMVKPPYSYIALITMAIQNAPDKKITLNGIYQFIMDRPFYRDNKQGWQNSIRHNLSLNECFVKVP  
 RDDKKPKGKSYWTLDPDSYNMFENGSLRRRRRFKKKDAVKDKEEKDRLHLKEPPPPGRQPPAPPEQAD  
 GNAPGPQPPPVRIQDIKTENGTCPSPQPPLSPAAALGSGSAAAVPKIESPDSSSSSLSSGSSPPGSLPSA  
 RPLSLDGADSAPPPAPSPAPPHHSQGFSDNIMTSLRGSQSAAEELSSGLLASAAAASSRAGIAPPLAL  
 GAYSPGQSSLYSPCSQTSAGSSGGGGGAGAAGGAGGAGTYHCNLQAMSLYAAGERGGHLQGAPGGAG  
 GSAVDDPLPDYSLPPVTSSSSSSLSHGGGGGGGGQEAQHHPAAHQRLTSWYLNQAGGDLGHLASAAA  
 AAAAAGYPGQQQNFHVSREMFEQRIGLNNSPVNGNSSCQMAFSSQSLYRTSGAFVYDCSKF

**TR**TRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:**

[https://cdn.origene.com/chromatograms/mg2637\\_a02.zip](https://cdn.origene.com/chromatograms/mg2637_a02.zip)

**Restriction Sites:**

Sgfl-Mlul

**Cloning Scheme:**


**ACCN:** NM\_001453

**ORF Size:** 1659 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](mailto: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.

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

**RefSeq:** [NM\\_001453.3](#)

**RefSeq Size:** 3452 bp

**RefSeq ORF:** 1662 bp

**Locus ID:** 2296

**UniProt ID:** [Q12948](#)

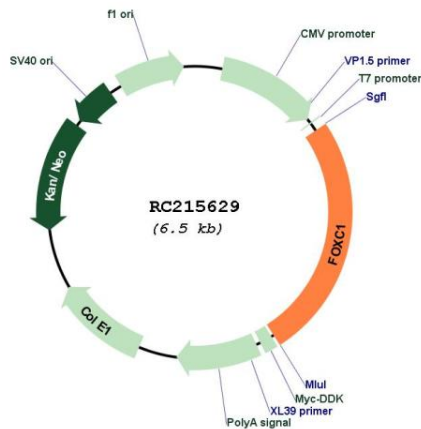
**Cytogenetics:** 6p25.3

**Protein Families:** Druggable Genome, Transcription Factors

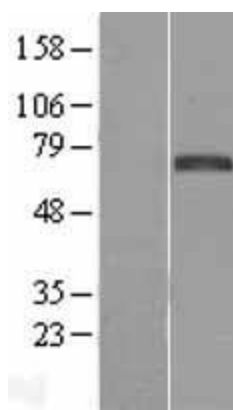
**MW:** 56.6 kDa

**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 has been shown to play a role in the regulation of embryonic and ocular development. Mutations in this gene cause various glaucoma phenotypes including primary congenital glaucoma, autosomal dominant iridogoniodysgenesis anomaly, and Axenfeld-Rieger anomaly. [provided by RefSeq, Jul 2008]

### Product images:



Circular map for RC215629



Western blot validation of overexpression lysate (Cat# [LY400565]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC215629 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).