

## Product datasheet for **RC220009**

### **FGFR1 (NM\_023106) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	FGFR1 (NM_023106) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	FGFR1
Synonyms:	bFGF-R-1; BFGFR; CD331; CEK; ECCL; FGFBR; FGFR-1; FLG; FLT-2; FLT2; HBGFR; HH2; HRTFDS; KAL2; N-SAM; OGD
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**ORF Nucleotide  
Sequence:**

>RC220009 ORF sequence  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGCATCGCC**

ATGTGGAGCTGGAAGTGCCTCCTCTTCTGGGCTGTGCTGGTACACGCCACACTCTGCACCGCTAGGCCGT  
 CCCCGACCTTGCCTGAACAAGATGCTCTCCCTCCTCGGAGGATGATGATGATGATGACTCCTCTTC  
 AGAGGAGAAAGAAACAGATAACACCAAACCAAACCCCGTAGCTCCATATTGGACATCCCCAGAAAAGATG  
 GAAAAGAAATTGCATGCAGTGCCGGCTGCCAAGACAGTGAAGTTCAAATGCCCTTCCAGTGGGACCCCAA  
 ACCCCACACTGCGCTGGTTGAAAATGGCAAAGAATTCAAACCTGACCACAGAATTGGAGGCTACAAGGT  
 CCGTTATGCCACCTGGAGCATATAATGGACTCTGTGGTGCCTCTGACAAGGGCAACTACACCTGCATT  
 GTGGAGAATGAGTACGGCAGCATCAACCACACATACCAGCTGGATGTCGTGGAGCGGTCCCTCACCGGC  
 CCATCCTGCAAGCAGGGTTGCCCGCAACAAAACAGTGGCCCTGGGTAGCAACGTGGAGTTCATGTGTAA  
 GGTGTACAGTGACCCGCAGCCGCACATCCAGTGGCTAAAGCACATCGAGGTGAATGGGAGCAAGATTGGC  
 CCAGACAACCTGCCTTATGTCCAGATCTTGAAGACTGCTGGAGTTAATACCACCGACAAAGAGATGGAGG  
 TGCTTCACTTAAGAAATGTCTCCTTTGAGGACGCAAGGGAGTATACGTGCTTGGCGGGTAACTCTATCGG  
 ACTCTCCCATCACTCTGCATGGTTGACCGTTCTGGAAGCCCTGGAAGAGAGGGCCGGCAGTGATGACCTCG  
 CCCCTGTACCTGGAGATCATCTATTGCACAGGGGCCCTTCTCATCTCCTGCATGGTGGGGTCGGTCA  
 TCGTCTACAAGATGAAGAGTGGTACCAAGAAGAGTGACTTCCACAGCCAGATGGCTGTGCACAAGCTGGC  
 CAAGAGCATCCCTCTGCGCAGACAGGTAACAGTGTCTGCTGACTCCAGTGCATCCATGAACTCTGGGGTT  
 CTTCTGGTTCGGCCATCACGGCTCTCCTCCAGTGGGACTCCCATGCTAGCAGGGGTCTCTGAGTATGAGC  
 TTCCCGAAGACCCTCGCTGGGAGCTGCCTCGGGACAGACTGGTCTTAGGCAAACCCCTGGGAGAGGGCTG  
 CTTTGGGCAGGTGGTGTGGCAGAGGCTATCGGGCTGGACAAGGACAAACCCCAACCGTGTGACCAAAGTG  
 GCTGTGAAGATGTTGAAGTCGGACGCAACAGAGAAAGACTTGTGACACCTGATCTCAGAAATGGAGATGA  
 TGAAGATGATCGGGAAGCATAAGAATATCATCAACCTGCTGGGGCCTGCACGCAGGATGGTCCCTTGTA  
 TGTCTCGTGGAGTATGCCTCCAAGGGCAACCTGCGGGAGTACCTGCAGGCCCGGAGGCCCCAGGGCTG  
 GAATACTGCTACAACCCAGCCACAACCCAGAGGAGCAGCTCTCCTCCAAGGACCTGGTGTCTGCGCCT  
 ACCAGGTGGCCCGAGGCATGGAGTATCTGGCCTCAAGAAGTGCATACACCGAGACCTGGCAGCCAGGAA  
 TGTCTGGTGACAGAGGACAATGTGATGAAGATAGCAGACTTTGGCTCGCACGGGACATTCACCACATC  
 GACTACTATAAAAAGACAACCAACGGCCGACTGCCTGTGAAGTGGATGGCACCCGAGGCATTATTTGACC  
 GGATCTACACCCACCAGAGTGTGTGGTCTTTTCGGGGTGTCTCCTGTGGGAGATCTTCACTCTGGGCGG  
 CTCCCCATACCCCGGTGTGCCTGTGGAGGAACCTTTCAAGCTGCTGAAGGAGGGTACCCGATGGACAAG  
 CCCAGTAACTGCACCAACGAGCTGTACATGATGATGCGGGACTGTGGCATGCAGTGCCTCACAGAGAC  
 CCACCTTCAAGCAGCTGGTGAAGACCTGGACCGCATCGTGGCCTTGACCTCAACCCAGGAGTACCTGGA  
 CCTGTCCATGCCCTGGACCACTACTCCCCAGCTTTCCCGACACCCGGAGCTCTACGTGCTCCTCAGGG  
 GAGGATTCCGTCTTCTCATGAGCCGCTGCCCGAGGAGCCCTGCCTGCCCGACACCCAGCCAGCTTG  
 CCAATGGCGGACTCAAACGCCGC

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >RC220009 protein sequence  
Red=Cloning site Green=Tags(s)

MWSWKLLFWAVLVATLCTARPSPTLPEQDALPSEDDDDDDSSSEKETDNTKPNPVAPYWTSPEKM  
 EKKLHAVPAAKTVKFKCPSGTPNPTLRWLKNGKEFKPDHRIGGYKVRYATWSIIMDSVVPDSDKGNVTCI  
 VENEYGSINHYYQLDVVERSPHRPILQAGLPANKTVALGSNVEFMCKVYSDPQPHIQWLKHIEVNGSKIG  
 PDNLPYVQILKTAGVNTTDKEMEVLHLRNVSFEDAGEYTCLAGNSIGLSHSAWLTVLEALEERPAMVTS  
 PLYLEIIYCTGAFLLISCMVGSVIVYKMKSGTKKSDFFHSQMAVHKLAKSIPLRRQVTVSADSSASMNSGV  
 LLVRPSRLSSSGTPMLAGVSEYELPEDPRWELPRDRLVLGKPLGEGCFGQVVLAEAIGLDKDKPNRVTKV  
 AVKMLKSDATEKDLSDLISEMEMMKMIGKHKNIINLLGACTQDGPLYVIVEYASKGNLREYLQARRPPGL  
 EYCYNPSHNPEEQLSSKDLVSCAYQVARGMEYLASKKCIHRDLAARNVLVTEDNMKIADFLARDIHHI  
 DYYKKTNGRLPVKWMPEALFDRIYTHQSDVVSFVLLWEIFTLGGSPYGPVPEELFKLLKEGHRMDK  
 PSNCTNELYMMMRDCWHAVPSQRPTFKQLVEDLDRIVALTSNQEYLDLMSPLDQYSPSPDTRSSTCSSG  
 EDSVFSHEPLPEEPCLPRHPAQLANGGLKRR

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6692\\_b05.zip](https://cdn.origene.com/chromatograms/mk6692_b05.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



\* The last codon before the Stop codon of the ORF

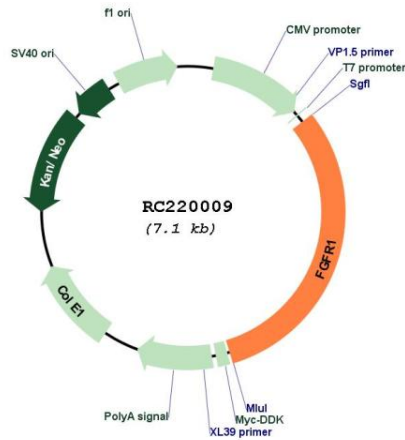
**ACCN:** NM\_023106

**ORF Size:** 2193 bp

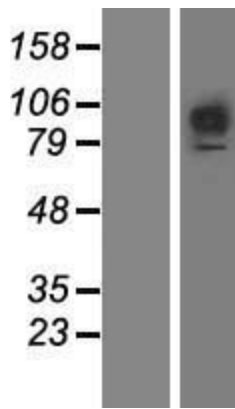
**OTI Disclaimer:** The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone 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.

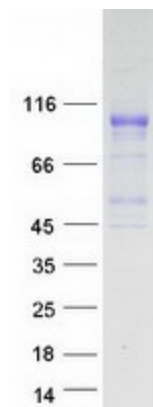
<b>Components:</b>	The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>Note:</b>	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
<b>RefSeq:</b>	<a href="#">NM_023106.3</a>
<b>RefSeq Size:</b>	5644 bp
<b>RefSeq ORF:</b>	2196 bp
<b>Locus ID:</b>	2260
<b>UniProt ID:</b>	<a href="#">P11362</a>
<b>Cytogenetics:</b>	8p11.23
<b>Protein Families:</b>	Druggable Genome, Protein Kinase, Transmembrane
<b>Protein Pathways:</b>	Adherens junction, MAPK signaling pathway, Melanoma, Pathways in cancer, Prostate cancer, Regulation of actin cytoskeleton
<b>MW:</b>	81.9 kDa
<b>Gene Summary:</b>	<p>The protein encoded by this gene is a member of the fibroblast growth factor receptor (FGFR) family, where amino acid sequence is highly conserved between members and throughout evolution. FGFR family members differ from one another in their ligand affinities and tissue distribution. A full-length representative protein consists of an extracellular region, composed of three immunoglobulin-like domains, a single hydrophobic membrane-spanning segment and a cytoplasmic tyrosine kinase domain. The extracellular portion of the protein interacts with fibroblast growth factors, setting in motion a cascade of downstream signals, ultimately influencing mitogenesis and differentiation. This particular family member binds both acidic and basic fibroblast growth factors and is involved in limb induction. Mutations in this gene have been associated with Pfeiffer syndrome, Jackson-Weiss syndrome, Antley-Bixler syndrome, osteoglophonic dysplasia, and autosomal dominant Kallmann syndrome 2. Chromosomal aberrations involving this gene are associated with stem cell myeloproliferative disorder and stem cell leukemia lymphoma syndrome. Alternatively spliced variants which encode different protein isoforms have been described; however, not all variants have been fully characterized. [provided by RefSeq, Jul 2008]</p>

**Product images:**


Circular map for RC220009



Western blot validation of overexpression lysate (Cat# [LY411517]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC220009 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified FGFR1 protein (Cat# [TP320009]). The protein was produced from HEK293T cells transfected with FGFR1 cDNA clone (Cat# RC220009) using MegaTran 2.0 (Cat# [TT210002]).