

## Product datasheet for **RC600020**

### **FGFR1 (NM\_023105) Human Tagged ORF Clone**

#### Product data:

Product Type:	Expression Plasmids
Product Name:	FGFR1 (NM_023105) Human Tagged ORF Clone
Tag:	DDK-His
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:	None
Vector:	pCMV6-XL5-DDK-His (PS100068)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RC600020 representing leader sequence plus the extracellular domain region of NM_023105 Red=Cloning site Blue=ORF Green=Tags(s)

GTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCTGGTACCGAGGAGATCCGCCGCCG  
CGATCGCC

ATGTGGAGCTGGAAGTGCCTCCTCTTCTGGGCTGTGCTGGTCACAGCCACACTCTGCACCCTAGGCCGT  
CCCCGACCTTGCCTGAACAAGATGCTCTCCCCTCCTCGGAGGATGATGATGATGATGACTCCTCTTC  
AGAGGAGAAAGAAACAGATAACACCAAACCAAACCGTATGCCCGTAGCTCCATATTGGACATCCCCAGAA  
AAGATGGAAGAAATTCATGCAGTCCCGCTGCCAAGACAGTGAAGTTCAAATGCCCTTCCAGTGGGA  
CCCCAAACCCCACTGCGCTGGTTGAAAAATGGCAAAGAATTCAAACCTGACCACAGAATTGGAGGCTA  
CAAGGTCCGTTATGCCACCTGGAGCATATAATGGACTCTGTGGTGCCCTCTGACAAGGGCAACTACACC  
TGCATTGTGGAGAATGAGTACGGCAGCATCAACCACACATACCAGCTGGATGTCGTGGAGCGGTCCCTC  
ACCGGCCCATCCTGCAAGCAGGTTGCCCGCAACAAAACAGTGGCCCTGGGTAGCAACGTGGAGTTCAT  
GTGTAAGGTGTACAGTGACCCGCAGCCGCACATCCAGTGGCTAAAGCACATCGAGGTGAATGGGAGCAAG  
ATTGGCCAGACAACCTGCCTTATGTCCAGATCTTGAAGACTGCTGGAGTTAATACCACCGACAAAGAGA  
TGGAGGTGCTTCACTTAAGAAATGTCTCCTTTGAGGACGCAGGGGAGTATACGTGCTTGGCGGGTAACTC  
TATCGGACTCTCCCATCACTCTGCATGGTTGACCGTTCTGGAAGCCCTGGAAGAGAGGCCGCGCAGTGATG  
ACCTCGCCCTGTACCTGGAG

ACGCGTTCAGGCGACTACAAGGATGACGACGATAAGGGATCTCATCATCACCATCACCATTAAATGAGATC  
TGGTACCGATATCAAGCTTGTGACTCTAGA



[View online »](#)

**Protein Sequence:** >RC600020 representing signal peptide plus the extracellular domain region of NM\_023105  
 Red=Cloning sites Green= DDK and 6XHIS Tags

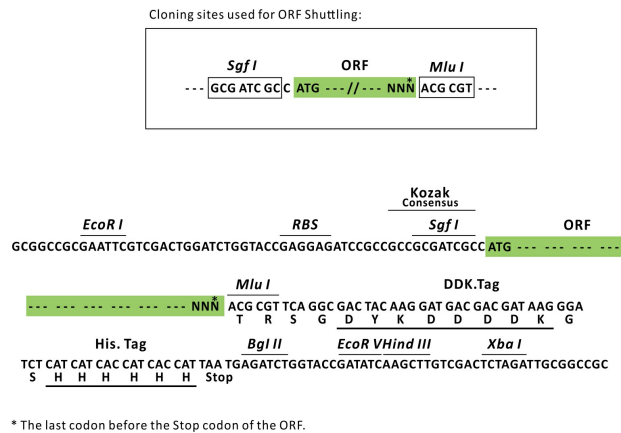
MWSWKCLLFWAVLVTATLCTARPSPTLPEQDALPSEDDDDDDSSSEKETDNTKPNRMPVAPYWTSPE  
 KMEKKLHAVPAAKTVKFKCPSSGTPNPTLRWLKNGKEFKPDHRIGGYKVRATWSIIMDSVVPDCKGNYT  
 CIVENEYGSINHTYQLDVVERSPHRPILQAGLPANKTVALGSNVEFMCKVYSDPQPHIQWLKHIEVNGSK  
 IGPDLNPYVQILKTAGVNTTDKEMEVLHLRNVSFEDAGEYTCLAGNSIGLSHSAWLTVLEALEERPAVM  
 TSPLYLE

TRSGTRSGDYKDDDDKGSHHHHHH

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk8117\\_e01.zip](https://cdn.origene.com/chromatograms/mk8117_e01.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_023105

**ORF Size:** 861 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 extra cellular domain of the protein 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\\_023105.2](#), [NP\\_075593.1](#)

**RefSeq Size:** 5650 bp

**RefSeq ORF:** 2202 bp

**Locus ID:** 2260

**UniProt ID:** [P11362](#)

**Cytogenetics:** 8p11.23

**Domains:** pkinase, TyrKc, S\_TKc, ig, IGc2, IG

**Protein Families:** Druggable Genome, Protein Kinase, Transmembrane

**Protein Pathways:** Adherens junction, MAPK signaling pathway, Melanoma, Pathways in cancer, Prostate cancer, Regulation of actin cytoskeleton

**MW:** 32.1 kDa

**Gene Summary:** 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]