

Product datasheet for **RC202080**

FGFR1 (NM_023110) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	FGFR1 (NM_023110) 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:

>RC202080 representing NM_023110
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGTGGAGCTGGAAGTGCCTCCTTTCTGGGCTGTGCTGGTACACGCCACACTCTGCACCGCTAGGCCGT
 CCCCGACCTTGCTGAACAAGCCAGCCCTGGGGAGCCCTGTGGAAGTGGAGTCCCTCCTGGTCCACCC
 CGGTGACCTGCTGCAGCTTCGCTGTGGGCTGCGGGACGATGTGCAGAGCATCAACTGGCTGCGGGACGGG
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 ATGCCCCGTGACCAAGTACTCCCCAGCTTTCCTGACACCCGGAGCTCTACGTGCTCTCAGGGGAGGATT
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 CGGACTCAAACGCCGC

ACGGTACCGGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC202080 representing NM_023110
 Red=Cloning site Green=Tags(s)

MWSWKCLLFWAVLVTATLCTARPSPTLPEQAQPWGAPVEVESFLVHPGDLLQLRCRLRDDVQVSINWLRDG
 VQLAESNRTRITGEEVEVQDVPADSGLYACVTSSPSGSDTTYFSVNVSDALPSSSEDDDDDDSSSEEK
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 QVVLAEAIGLDKDPNRVTKVAVKMLKSDATEKDLSDLISEMEMMKMIGKHKNIINLLGACTQDGPLYVI
 VEYASKGNLREYLQARRPPGLECYNPSHNP EEQLSSKDLVSCAYQVARGMEYLASKKCIHRDLAARNVL
 VTEDNVMIADFG LARDIHHIDYKKTNGRLPVKWM APEALFDRIYTHQSDVVSFVLLWEIFTLGGSP
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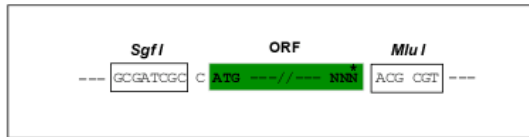
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mg2674_b01.zip

Restriction Sites: Sgfi-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:

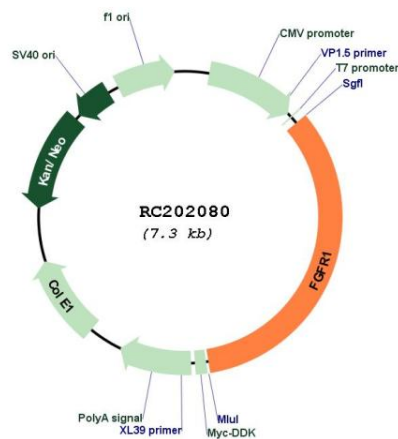


* The last codon before the Stop codon of the ORF

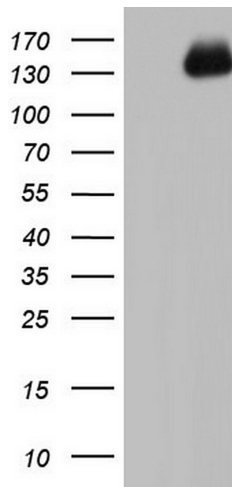
ACCN:	NM_023110
ORF Size:	2466 bp
OTI Disclaimer:	The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own 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:	<ol style="list-style-type: none">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_023110.3
RefSeq Size:	5917 bp
RefSeq ORF:	2469 bp
Locus ID:	2260
UniProt ID:	P11362
Cytogenetics:	8p11.23
Domains:	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:	89.4 kDa

Gene Summary:

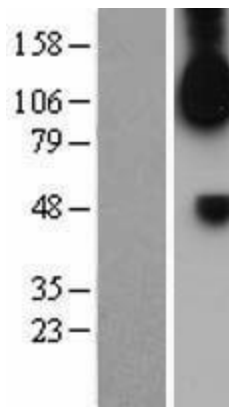
The protein encoded by this gene is a member of the fibroblast growth factor receptor (FGFR) family, where amino acid sequence is highly conserved between members and throughout evolution. FGFR family members differ from one another in their ligand affinities and tissue distribution. A full-length representative 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]

Product images:


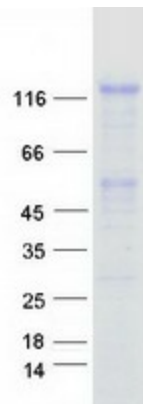
Circular map for RC202080



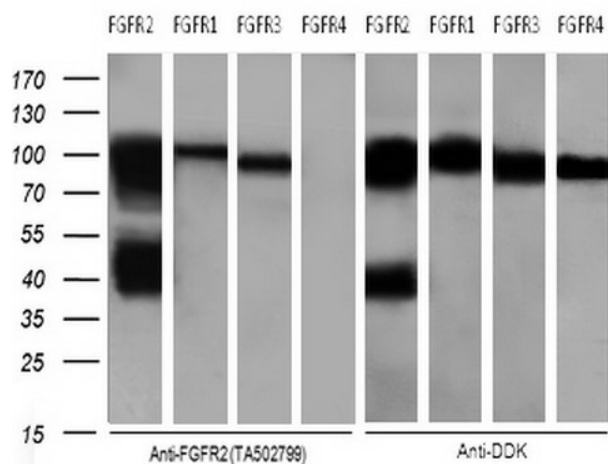
HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY FGFR1 (Cat# RC202080, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-FGFR1 (Cat# [TA802987]). Positive lysates [LY402963] (100ug) and [LC402963] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY402963]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC202080 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified FGFR1 protein (Cat# [TP302080]). The protein was produced from HEK293T cells transfected with FGFR1 cDNA clone (Cat# RC202080) using MegaTran 2.0 (Cat# [TT210002]).



Cross-Reactivity of anti-FGFR2 (Cat# [TA502799]) with FGFR1 and FGFR3, not with FGFR4. HEK293T cells were transfected with FGFR2 (Cat# [RC217098]), FGFR1 (Cat# RC202080), FGFR3 (Cat# [RC215533]), FGFR4 (Cat# [RC204230]) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-FGFR2 (Cat# [TA502799]) (1:500) and anti-DDK (Cat# TA50011, 1:2000), respectively.