

Product datasheet for RC214979

FGFR1 (NM_023108) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	FGFR1 (NM_023108) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	FGFR1
Synonyms:	BFGFR; CD331; CEK; FGFBR; FLG; FLJ99988; FLT2; HBGFR; KAL2; N-SAM; OGD
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC214979 representing NM_023108 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGTGGAGCTGGAAGTGCCTCCTCTTCTGGGCTGTGCTGGTCACAGCCACACTCTGCACCGCTAGGCCGT
CCCCGACCTTGCCTGAACAAGATGCTCTCCCTCCTCGGAGGATGATGATGATGATGACTCCTCTTC
AGAGGAGAAAGAAACAGATAACACCAAACCAACCCCGTAGCTCCATATTGGACATCCCCAGAAAAGATG
GAAAAGAAATTGCATGCAGTGCCGGCTGCCAAGACAGTGAAGTCAAATGCCCTTCCAGTGGACCCCAA
ACCCACACTGCGCTGGTTGAAAAATGGCAAGAATTCAAACCTGACCACAGAATTGGAGGCTACAAGGT
CGTTATGCCACCTGGAGCATCATAATGGACTCTGTGGTCCCTCTGACAAGGGCAACTACACCTGCATT
GTGGAGAATGAGTACGGCAGCATCAACCACACATACCAGCTGGATGTCGTGGAGCGGTCCCTCACCGGC
CCATCCTGCAAGCAGGTTGCCCGCAACAAAACAGTGGCCCTGGGTAGCAACGTGGAGTTCATGTGTAA
GGTGTACAGTGACCCGCAGCCGCACATCCAGTGGCTAAAGCACATCGAGGTGAATGGGAGCAAGATTGGC
CCAGACAACCTGCCTTATGTCCAGATCTGAAGTAATCATGGCACCAGTCTTCGTGGGCCAGTCTACTG
GGAAGGAGACCACTGTCTCGGGGCTCAAGTTCCTGTGGGCAGGCTCAGTTGCCCCGAATGGGATCATT
CCTCACGCTTCAGGCACACACTCCATCTCAGTAGGGATCTAGCCACATCCCCAGGACTAGTAACAGA
GGTCACAAAGTGGAGGTGAGCTGGGAACAGAGGGCTGCAGGGATGGTGGTCTGGTCTG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC214979 representing NM_023108
Red=Cloning site Green=Tags(s)

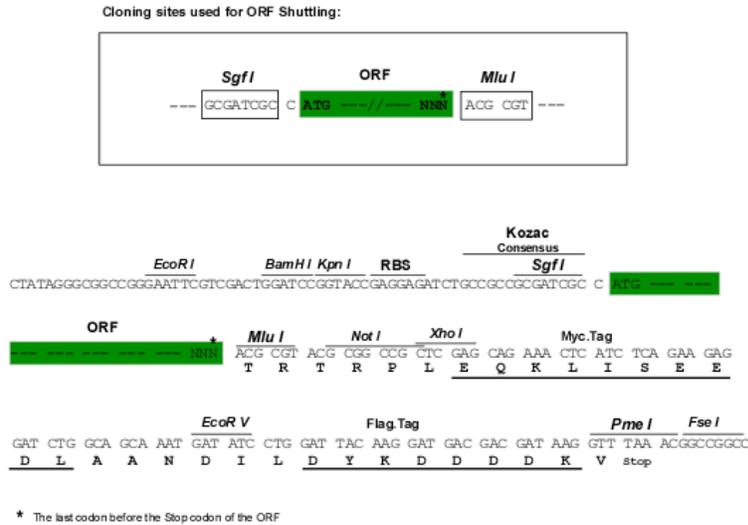
MWSWKLLFWAVLVTATLCTARPSPTLPEQDALPSEDDDDDDSSSEKETDNTKPNPVAPYWTSPEKM
 EKKLHAVPAAKTVKFKCPSGTPNPTLRWLKNGKEFKPDHRIGGYKVRYATWSIIMDSVVPSDKGNYSI
 VENEYGSINHYYQLDVVERSPHRPILQAGLPANKTVALGSNVEFMCKVYSDPQPHIQWLKHIEVNGSKIG
 PDNLPLYVQILKVIKMAPVVFVGQSTGKETT VSGAQVPVGR LSCPRMGSFLTLQAHTLHL SRDLATSPRTSNR
 GHKVEVSWEQRAAGMGGAGL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk8050_f04.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_023108

ORF Size: 900 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_023108.2](#), [NP_075596.1](#)

RefSeq Size: 2583 bp

RefSeq ORF: 902 bp

Locus ID: 2260

Cytogenetics: 8p11.23

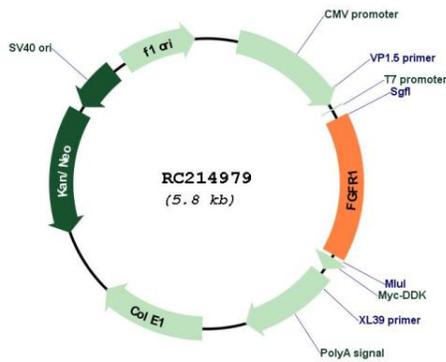
Domains: ig

Protein Families: Druggable Genome, Protein Kinase, Transmembrane

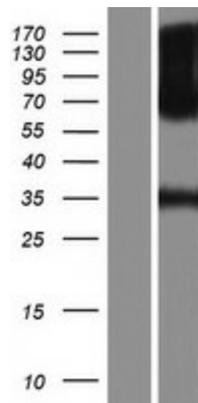
Protein Pathways: Adherens junction, MAPK signaling pathway, Melanoma, Pathways in cancer, Prostate cancer, Regulation of actin cytoskeleton

MW: 30.6 kDa

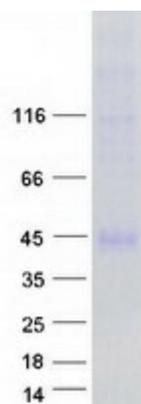
Gene Summary: The protein encoded by this gene is a member of the fibroblast growth factor receptor (FGFR) family, where amino acid sequence is highly conserved between members and throughout evolution. FGFR family members differ from one another in their ligand affinities and tissue distribution. A 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 RC214979



Western blot validation of overexpression lysate (Cat# [LY411519]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC214979 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified FGFR1 protein (Cat# [TP314979]). The protein was produced from HEK293T cells transfected with FGFR1 cDNA clone (Cat# RC214979) using MegaTran 2.0 (Cat# [TT210002]).