

Product datasheet for **RG210629**

FGFR1 (NM_023105) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	FGFR1 (NM_023105) Human Tagged ORF Clone
Tag:	TurboGFP
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-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>RG210629 representing NM_023105
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGTGGAGCTGGAAGTGCCTCCTCTTCTGGGCTGTGCTGGTACACGCCACTCTGCACCGCTAGGCCGT
 CCCCGACCTTGCCTGAACAAGATGCTCTCCCTCCTCGGAGGATGATGATGATGATGACTCCTCTTC
 AGAGGAGAAAGAAACAGATAACACCAAACCAAACCCCGTAGCTCCATATTGGACATCCCCAGAAAAGATG
 GAAAAGAAATTGCATGCAGTGCCGGCTGCCAAGACAGTGAAGTTCAAATGCCCTTCCAGTGGGACCCCAA
 ACCCCACACTGCGCTGGTTGAAAATGGCAAAGAATTCAAACCTGACCACAGAATTGGAGGCTACAAGGT
 CCGTTATGCCACCTGGAGCATATAATGGACTCTGTGGTGCCTCTGACAAGGGCAACTACACCTGCATT
 GTGGAGAATGAGTACGGCAGCATCAACCACACATACCAGCTGGATGTCGTGGAGCGGTCCCTCACCGGC
 CCATCCTGCAAGCAGGGTTGCCCGCAACAAAACAGTGGCCCTGGGTAGCAACGTGGAGTTCATGTGTA
 GGTGTACAGTGACCCGCAGCCGCACATCCAGTGGCTAAAGCACATCGAGGTGAATGGGAGCAAGATTGGC
 CCAGACAACCTGCCTTATGTCCAGATCTTGAAGACTGCTGGAGTTAATACCACCGACAAAGAGATGGAGG
 TGCTTCACTTAAGAAATGTCTCCTTTGAGGACGACGGGGAGTATACGTGCTTGGCGGGTAACTCTATCGG
 ACTCTCCCATCACTCTGCATGGTTGACCCTTCTGGAAGCCCTGGAAGAGAGGGCCGGCAGTGATGACCTCG
 CCCCTGTACCTGGAGATCATCTATTGCACAGGGGCCCTTCTCATCTCCTGCATGGTGGGGTCGGTCA
 TCGTCTACAAGATGAAGAGTGGTACCAAGAAGAGTGACTTCCACAGCCAGATGGCTGTGCACAAGCTGGC
 CAAGAGCATCCCTCTGCGCAGACAGGTAACAGTGTCTGCTGACTCCAGTGCATCCATGAACTCTGGGGTT
 CTTCTGGTTCGGCCATCACGGCTCTCCTCAGTGGGACTCCCATGCTAGCAGGGGTCTCTGAGTATGAGC
 TTCCCAGAAGCCCTCGCTGGGAGCTGCCTCGGGACAGACTGGTCTTAGGCAAACCCCTGGGAGAGGCACTG
 CTTTGGGCAGGTGGTGTGGCAGAGGCTATCGGGCTGGACAAGGACAAACCCCAACCGTGTGACCAAAGTG
 GCTGTGAAGATGTTGAAGTCGGACGCAACAGAGAAAGACTTGTGACACCTGATCTCAGAAATGGAGATGA
 TGAAGATGATCGGGAAGCATAAGAATATCATCAACCTGCTGGGGCCTGCACGCAGGATGGTCCCTTGTA
 TGTCTCGTGGAGTATGCCTCCAAGGGCAACCTGCGGGAGTACCTGCAGGCCCGGAGGCCCCAGGGCTG
 GAATACTGCTACAACCCAGCCACAACCCAGAGGAGCAGCTCTCCTCCAAGGACCTGGTGTCTGCGCCT
 ACCAGGTGGCCCGAGGCATGGAGTATCTGGCCTCAAGAAGTGCATACACCGAGACCTGGCAGCCAGGAA
 TGTCTGGTGACAGAGGACAATGTGATGAAGATAGCAGACTTTGGCTCGCACGGGACATTCACCACATC
 GACTACTATAAAAAGACAACCAACGGCCGACTGCCTGTGAAGTGGATGGCACCCGAGGCATTATTTGACC
 GGATCTACACCCACCAGAGTGTGTGGTCTTTCCGGGTGCTCCTGTGGGAGATCTTCACTCTGGGCGG
 CTCCCCATACCCCGGTGTGCCTGTGGAGGAACCTTTCAAGCTGCTGAAGGAGGGTCACCGATGGACAAG
 CCCAGTAACTGCACCAACGAGCTGTACATGATGATGCGGGACTGCTGGCATGCAGTGCCTCACAGAGAC
 CCACCTTCAAGCAGCTGGTGAAGACCTGGACCGCATCGTGGCCTTGACCTCAACAGGAGTACCTGGA
 CCTGTCCATGCCCTGGACCACTACTCCCCAGCTTTCCCGACACCCGGAGCTCTACGTGCTCCTCAGGG
 GAGGATCCGTCTTCTCATGAGCCGCTGCCCGAGGACCTGCCTGCCCGACACCCAGCCAGCCAGCTTG
 CCAATGGCGGACTCAAACGCCGC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG210629 representing NM_023105
Red=Cloning site Green=Tags(s)

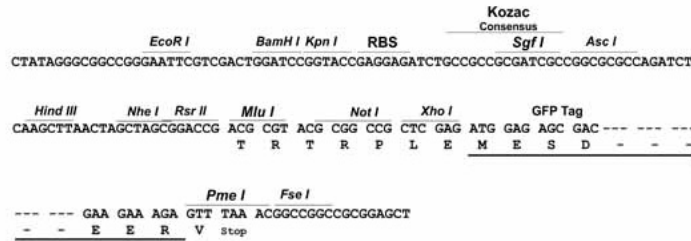
```
MWSWKCLLFWAVLVATLCTARPSPTLPEQDALPSEDDDDDDSSSEKETDNTKPNPVAPYWTSPEKM
EKKLHAVPAAKTVKFKCPSSTGPNPTLRWLKNGKEFKPDHRIGGYKVRYATWSIIMDSVVP SDKGNYTCI
VENEYGSINHTYQLDVVERSPHRPILQAGLPANKTVALGSNVEFMCKVYSDPQPHIQWLKHIEVNGSKIG
PDNLPYVQILKTAGVNTTDKEMEVLHLRNVSFEDAGEYTCLAGNSIGLSHHSAWLTVLEALEERPAMVTS
PLYLEIIIIYCTGAFLLISCMVGSVIVYKMKSGTKKSDFHSMQMAVHKLAKSIPLRRQVTVSADSSASMNSGV
LLVRPSRLSSSGTPMLAGVSEYELPEDPRWELPRDRLVLGKPLGEGCFGQVVLAEAIGLDKDKPNRVTKV
AVKMLKSDATEKDLSDLISEMEMMKMIGKHKNIINLLGACTQDGPLYVIVEYASKGNLREYLQARRPPGL
EYCYNPSHNPEEQSSKDLVSCAYQVARGMEYLASKKCIHRDLAARNVLVTEDNVMKIADFLARDIHHI
DYKKTTNGRLPVKWMPEALFDRIYTHQSDVVSFGVLLWEIFTLGGSPYPGVPVEELFKLLKEGHRMDK
PSNCTNELYMMMRDCWHAVPSQRPTFKQLVEDLDRIVALTSNQEYLDLMSPLDQYSPSPDTRSSSTCSSG
EDSVFSHEPLPEEPCLPRHPAQLANGGLKRR
```

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:



ACCN: NM_023105

ORF Size: 2193 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 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.

RefSeq: [NM_023105.2](#), [NP_075593.1](#)

RefSeq Size: 5650 bp

RefSeq ORF: 2202 bp

Locus ID: 2260

UniProt ID: [P11362](#)

Cytogenetics: 8p11.23

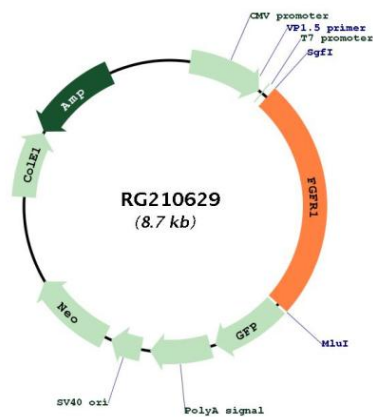
Domains: pkinase, TyrKc, S_TKc, ig, IGc2, IG

Protein Families: Druggable Genome, Protein Kinase, Transmembrane

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

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 RG210629