

Product datasheet for SC329149

OriGene Technologies, Inc.

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FGFR1 (NM_001174064) Human Untagged Clone

Product data:

Product Type: Expression Plasmids

Product Name: FGFR1 (NM_001174064) Human Untagged Clone

Tag: Tag Free
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-Neo

E. coli Selection: Ampicillin (100 ug/mL)



Fully Sequenced ORF:

>NCBI ORF sequence for NM_001174064, the custom clone sequence may differ by one or more nucleotides

ATGGCAGCTGTGACCCGGGATTTCGGTGAGATGCTTCTGCACTCTGGCCGGGTCCTGCCA GACCTGCTGCAGCTTCGCTGTCGGCTGCGGGACGATGTGCAGAGCATCAACTGGCTGCGG GACGGGGTGCAGCTGGCGGAAAGCAACCGCACCGCATCACAGGGGAGGAGGTGGAGGTG CAGGACTCCGTGCCCGCAGACTCCGGCCTCTATGCTTGCGTAACCAGCAGCCCCTCGGGC AGTGACACCACCTACTTCTCCGTCAATGTTTCAGATGCTCTCCCCTCCTCGGAGGATGAT GATGATGATGACTCCTCTTCAGAGGAGAAAGAAACAGATAACACCAAACCAAACCGT CCGGCTGCCAAGACAGTGAAGTTCAAATGCCCTTCCAGTGGGACCCCAAACCCCACACTG CGCTGGTTGAAAAATGGCAAAGAATTCAAACCTGACCACAGAATTGGAGGCTACAAGGTC CGTTATGCCACCTGGAGCATCATAATGGACTCTGTGGTGCCCTCTGACAAGGGCAACTAC ACCTGCATTGTGGAGAATGAGTACGGCAGCATCAACCACACATACCAGCTGGATGTCGTG GAGCGGTCCCCTCACCGGCCCATCCTGCAAGCAGGGTTGCCCGCCAACAAAACAGTGGCC CTGGGTAGCAACGTGGAGTTCATGTGTAAGGTGTACAGTGACCCGCAGCCGCACATCCAG TGGCTAAAGCACATCGAGGTGAATGGGAGCAAGATTGGCCCAGACAACCTGCCTTATGTC CAGATCTTGAAGACTGCTGGAGTTAATACCACCGACAAAGAGATGGAGGTGCTTCACTTA AGAAATGTCTCCTTTGAGGACGCAGGGGAGTATACGTGCTTGGCGGGTAACTCTATCGGA CTCTCCCATCACTCTGCATGGTTGACCGTTCTGGAAGCCCTGGAAGAGAGGCCGGCAGTG ATGACCTCGCCCCTGTACCTGGAGATCATCATCTATTGCACAGGGGCCTTCCTCATCTCC TGCATGGTGGGGTCGGTCATCGTCTACAAGATGAAGAGTGGTACCAAGAAGAGTGACTTC CACAGCCAGATGGCTGTGCACAAGCTGGCCAAGAGCATCCCTCTGCGCAGACAGGTGTCT GCTGACTCCAGTGCATCCATGAACTCTGGGGTTCTTCTGGTTCGGCCATCACGGCTCTCC TCCAGTGGGACTCCCATGCTAGCAGGGGTCTCTGAGTATGAGCTTCCCGAAGACCCTCGC TGGGAGCTGCCTCGGGACAGACTGGTCTTAGGCAAACCCCTGGGAGAGGGCTGCTTTGGG CAGGTGGTGTTGGCAGAGGCTATCGGGCTGGACAAGGACAAACCCAACCGTGTGACCAAA GTGGCTGTGAAGATGTTGAAGTCGGACGCAACAGAGAAAGACTTGTCAGACCTGATCTCA GAAATGGAGATGATGAAGATGATCGGGAAGCATAAGAATATCATCAACCTGCTGGGGGCC TGCACGCAGGATGGTCCCTTGTATGTCATCGTGGAGTATGCCTCCAAGGGCAACCTGCGG GAGTACCTGCAGGCCCGGAGGCCCCCAGGGCTGGAATACTGCTACAACCCCAGCCACAAC CCAGAGGAGCAGCTCTCCTCCAAGGACCTGGTGTCCTGCGCCTACCAGGTGGCCCGAGGC ATGGAGTATCTGGCCTCCAAGAAGTGCATACACCGAGACCTGGCAGCCAGGAATGTCCTG GTGACAGAGGACAATGTGATGAAGATAGCAGACTTTGGCCTCGCACGGGACATTCACCAC ATCGACTACTATAAAAAGACAACCAACGGCCGACTGCCTGTGAAGTGGATGGCACCCGAG GCATTATTTGACCGGATCTACACCCACCAGAGTGATGTGTGGTCTTTCGGGGTGCTCCTG TGGGAGATCTTCACTCTGGGCGGCTCCCCATACCCCGGTGTGCCTGTGGAGGAACTTTTC AAGCTGCTGAAGGAGGGTCACCGCATGGACAAGCCCAGTAACTGCACCAACGAGCTGTAC ATGATGATGCGGGACTGCTGGCATGCAGTGCCCTCACAGAGACCCACCTTCAAGCAGCTG GTGGAAGACCTGGACCGCATCGTGGCCTTGACCTCCAACCAGGAGTACCTGGACCTGTCC ATGCCCCTGGACCAGTACTCCCCCAGCTTTCCCGACACCCGGAGCTCTACGTGCTCCTCA CCAGCCCAGCTTGCCAATGGCGGACTCAAACGCCGCTGA

Restriction Sites: Please inquire **ACCN:** NM 001174064



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 customercom 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. <u>More info</u>

OTI Annotation:

This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.

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: <u>NM 001174064.1</u>, <u>NP 001167535.1</u>

RefSeq Size: 5963 bp

 RefSeq ORF:
 2439 bp

 Locus ID:
 2260

 UniProt ID:
 P11362

 Cytogenetics:
 8p11.23

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]

Transcript Variant: This variant (11) includes an alternate exon, uses an alternate translation start site, and uses an alternate in-frame splice site in the central coding region, compared to variant 1. The resulting isoform (11) has a shorter and distinct N-terminus and lacks a 2-aa segment, compared to isoform 1.