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Product datasheet for SC323629

FGFR1 (NM_015850) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	FGFR1 (NM_015850) 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:	None
Vector:	pCMV6-XL4
E. coli Selection:	Ampicillin (100 ug/mL)

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Fully Sequenced ORF:

>NCBI ORF sequence for NM_015850, the custom clone sequence may differ by one or more nucleotides

ATGTGGAGCTGGAAGTGCCTCCTCTTCTGGGCTGTGCTGGTCACAGCCACACTCTGCACCGCTAGGCCGT
CCCCGACCTTGCCTGAACAAGCCCAGCCCTGGGGAGCCCCTGTGGAAGTGGAGTCCTTCCTGGTCCACCC
CGGTGACCTGCTGCAGCTTCGCTGTCGGCTGCGGGACGATGTGCAGAGCATCAACTGGCTGCGGGACGGG
GTGCAGCTGGCGGAAAGCAACCGCACCCGCATCACAGGGGAGGAGGTGGAGGTGCAGGACTCCGTGCCCG
CAGACTCCGGCCTCTATGCTTGCGTAACCAGCAGCCCCTCGGGCAGTGACACCACCTACTTCTCCGTCAA
TGTTTCAGATGCTCTCCCCTCCTCGGAGGATGATGATGATGATGATGACTCCTCTTCAGAGGAGAAAGAA
ACAGATAACACCAAACCAAACCCCGTAGCTCCATATTGGACATCCCCAGAAAAGATGGAAAAGAAATTGC
ATGCAGTGCCGGCTGCCAAGACAGTGAAGTTCAAATGCCCTTCCAGTGGGACCCCAAACCCCACACTGCG
CTGGTTGAAAAATGGCAAAGAATTCAAACCTGACCACAGAATTGGAGGCTACAAGGTCCGTTATGCCACC
TGGAGCATCATAATGGACTCTGTGGTGCCCTCTGACAAGGGCAACTACACCTGCATTGTGGAGAATGAGT
ACGGCAGCATCAACCACACATACCAGCTGGATGTCGTGGAGCGGTCCCCTCACCGGCCCATCCTGCAAGC
AGGGTTGCCCGCCAACAAAACAGTGGCCCTGGGTAGCAACGTGGAGTTCATGTGTAAGGTGTACAGTGAC
CCGCAGCCGCACATCCAGTGGCTAAAGCACATCGAGGTGAATGGGAGCAAGATTGGCCCAGACAACCTGC
CTTATGTCCAGATCTTGAAGACTGCTGGAGTTAATACCACCGACAAAGAGATGGAGGTGCTTCACTTAAG
AAATGTCTCCTTTGAGGACGCAGGGGAGTATACGTGCTTGGCGGGTAACTCTATCGGACTCTCCCATCAC
TCTGCATGGTTGACCGTTCTGGAAGCCCTGGAAGAGAGGCCGGCAGTGATGACCTCGCCCCTGTACCTGG
AGATCATCATCTATTGCACAGGGGCCTTCCTCATCTCCTGCATGGTGGGGTCGGTCATCGTCTACAAGAT
GAAGAGTGGTACCAAGAAGAGTGACTTCCACAGCCAGATGGCTGTGCACAAGCTGGCCAAGAGCATCCCT
CTGCGCAGACAGGTAACAGTGTCTGCTGACTCCAGTGCATCCATGAACTCTGGGGTTCTTCTGGTTCGGC
CATCACGGCTCTCCTCCAGTGGGACTCCCATGCTAGCAGGGGTCTCTGAGTATGAGCTTCCCGAAGACCC
TCGCTGGGAGCTGCCTCGGGACAGACTGGTCTTAGGCAAACCCCTGGGAGAGGGCTGCTTTGGGCAGGTG
GTGTTGGCAGAGGCTATCGGGCTGGACAAGGACAAACCCAACCGTGTGACCAAAGTGGCTGTGAAGATGT
TGAAGTCGGACGCAACAGAGAAAGACTTGTCAGACCTGATCTCAGAAATGGAGATGATGAAGATGATCGG
GAAGCATAAGAATATCATCAACCTGCTGGGGGCCTGCACGCAGGATGGTCCCTTGTATGTCATCGTGGAG
TATGCCTCCAAGGGCAACCTGCGGGAGTACCTGCAGGCCCGGAGGCCCCCAGGGCTGGAATACTGCTACA
ACCCCAGCCACAACCCAGAGGAGCAGCTCTCCTCCAAGGACCTGGTGTCCTGCGCCTACCAGGTGGCCCG
AGGCATGGAGTATCTGGCCTCCAAGAAGTGCATACACCGAGACCTGGCAGCCAGGAATGTCCTGGTGACA
GAGGACAATGTGATGAAGATAGCAGACTTTGGCCTCGCACGGGACATTCACCACATCGACTACTATAAAA
AGACAACCAACGGCCGACTGCCTGTGAAGTGGATGGCACCCGAGGCATTATTTGACCGGATCTACACCCA
CCAGAGTGATGTGTGGTCTTTCGGGGTGCTCCTGTGGGAGATCTTCACTCTGGGCGGCTCCCCATACCCC
GGTGTGCCTGTGGAGGAACTTTTCAAGCTGCTGAAGGAGGGTCACCGCATGGACAAGCCCAGTAACTGCA
CCAACGAGCTGTACATGATGATGCGGGACTGCTGGCATGCAGTGCCCTCACAGAGACCCACCTTCAAGCA
GCTGGTGGAAGACCTGGACCGCATCGTGGCCTTGACCTCCAACCAGGAGTACCTGGACCTGTCCATGCCC
CTGGACCAGTACTCCCCCAGCTTTCCCGACACCCGGAGCTCTACGTGCTCCTCAGGGGAGGATTCCGTCT
TCTCTCATGAGCCGCTGCCCGAGGAGCCCTGCCTGCCCCGACACCCAGCCCAGCTTGCCAATGGCGGACT
CAAACGCCGCTGA

5' Read Nucleotide Sequence:

>OriGene 5' read for mutant NM_015850 unedited
ACCGCCGTTGAGCAATGGGCGGTAGGCGTGTACGGTGGGAGGTCTATATAAGCAGAGCTCGTTTAGTGAA
CCGTCAGAATTTTGTAATACGACTCACTATAGGGCGGCCGCGAATTCGGCACGAGGCCGGTGCAGCCGCA
GCGCGCGGAGGAACCCGGGTGTGCCGGGAGCTGGGCGGCCACGTCCGGACGGGACCGAGACCCCTCGTAG
CGCATTGCGGCGACCTCGCCTTCCCCGGCCGCGAGCGCGCCGCTGCTTGAAAAGCCGCGGAACCCAAGGA
CTTTTCTCCGGTCCGAGCTCGGGGCGCCCCGCAGGGGCGCACGGTACCCGTGCTGCAGTCGGGGCACGCC
GCGGGCGCCGGGGCCTCCGCAGGGGCGATGGGAGCCCCGGTCTTGCAAGGAAAGTTGAGGGCGCCCGCCC
GCTGGCGTTTCTTGGAAGGAGGGGGGGCACAAAGGTCCTGAAAACCCGGGTTGGCCGGGACGGGAAGCCT
TTCCCCGGGCCGGCTTTGGGGGCACCACTTTCCGGGCTCAATGTGTTCCCGCCCGGGCCTGGGAGGCCCC
GAACCACCGACCCCCCCCCGGAGAGTCAGACGCCCGGCCCGGGGAGCTTCTTGCAACCCCCGCCAGAAAC
CAAACCAAACCCCGGGGCCGGGGGGGCCCGAACCCGGGAACCCGGACACCCCCCCGTTCACAAAACCCCG
GGGGAGATTTCCCGAGGGGGAAACCTTCCACCCAGAGGGGGGGTTATTTTAAAAAGAGGAGGATAGCTCT
CTCTTGGGGAATATCCAGGGAAGAGGGGGCTCTTGTCCCACACCCTCTACGGGAAAAATGGAAATAGACG
CGGAGAGGCTCTCTTTTGTGGGGTTGTGGTGTGACACACAAATTTTGCGCTGGAGGCGATCCCCCTCTAT
GTATACACATATCACCTTAGGAGACGCACGAGAATGAGTCTCTCTCGCGTGACCCCAGATGCGCCAATGC
ATCC

Kinase Domain Sequence:

>SC323629 kinase domain raw sequence. By performing BLASTX analysis with this sequence against NCBI refernce protein database, you can confirm the presence of the kinase-deficient mutation
GRGGCTGCTTGGGCAGGTGKGTTGGCAGAGGCTATCGGGCTGGACAAGGACAAACCCAACCGTGTGACCA
AAGTGGCTGTGATGATGTTGAAGTCGGACGCAACAGAGAAAGACTTGTCAGACCTGATCTCAGAAATGGA
GATGATGAAGATGATCGGGAAGCATAAGAATATCATCAACCTGCTGGGGGCCTGCACGCAGGATGGTCCC
TTGTATGTCATCGTGGAGTATGCCTCCAAGGGCAACCTGCGGGAG

Restriction Sites: Please inquire

ACCN: NM_015850

Insert Size: 4300 bp

OTI Disclaimer: Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).

OTI Annotation: This kinase-deficient mutant clone was generated by created by site-directed mutagenesis from the corresponding wild-type clone. See details in "Application of active and kinase-deficient kinome collection for identification of kinases regulating hedgehog signaling." Cell. 2008 May p536-548.

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_015850.2, NP_056934.2

RefSeq Size:	5911 bp
RefSeq ORF:	2463 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] Transcript Variant: This variant (2) uses an alternate in-frame splice site in the 5' coding region, compared to variant 1. The resulting isoform (2), also known as isoform A, III, and the 3-Ig domain form, lacks a 2-aa segment, compared to isoform 1. Both variants 2 and 12 encode the same isoform.