

Product datasheet for **SC323649**

FGFR2 (BC039243) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	FGFR2 (BC039243) Human Untagged Clone
Tag:	Tag Free
Symbol:	FGFR2
Synonyms:	bacteria-expressed kinase; BEK; BEK fibroblast growth factor receptor; BFR-1; CD332; CEK3; CFD1; ECT1; FGF receptor; FLJ98662; hydroxyaryl-protein kinase; JWS; K-SAM; kerat; KGFR; OTTHUMP00000020621; OTTHUMP00000020629; soluble FGFR4 variant 4; TK14; TK25
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL4</u>
E. coli Selection:	Ampicillin (100 ug/mL)



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Fully Sequenced ORF: >NCBI ORF sequence for BC039243, the custom clone sequence may differ by one or more nucleotides

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ATGGTCAGCTGGGGTCGTTTCATCTGCCTGGTCGTTGGTCCACATGGCAACCTTGTCCCTGGCCCGGCCCT
CCTTCAGTTTAGTTGAGGATACACATTAGAGCCAGAAGGAGCACCATACTGGACCAACACAGAAAAGAT
GGAAAAGCGGCTCCATGCTGTGCTGCGGCAACACTGTCAAGTTTCGCTGCCAGCCGGGGGAAACCCA
ATGCCAACCATGCGGTGGCTGAAAAACGGGAAGGAGTTTAAGCAGGAGCATCGCATTGGAGGCTACAAGG
TACGAAACCAGCACTGGAGCCTCATTATGAAAAGTGTGGTCCCATCTGACAAGGGAAATTATACCTGTGT
GGTGGAGAATGAATACGGGTCCATCAATCACACGTACCACCTGGATGTTGTGGAGCGATCGCCTCACCGG
CCCATCCTCCAAGCCGGACTGCCGGCAAAATGCCTCCACAGTGGTCGGAGGAGACGTAGAGTTTGTCTGCA
AGGTTTACAGTGATGCCAGCCCCACATCCAGTGGATCAAGCACGTGAAAAGAACGGCAGTAAATACGG
GCCCGACGGGCTGCCCTACCTCAAGTTTCTCAAGGCCCGGTTAACACCACGGACAAAGAGATTGAG
GTTCTCTATATTCGGAATGTAACTTTGGAGACGCTGGGAATATACGTGCTTGGCGGTAAATTCTATTG
GGATATCCTTTCCTCTGATGTTGACAGTTTCCAGCGCCTGGAAGAGAAAAGGAGATTACAGCTTC
CCCAGACTACCTGGAGATAGCCATTTACTGCATAGGGGTCTTCTAATCGCTGTATGGTGGTAACAGTC
ATCCTGTGCCGAATGAAGAACACGACCAAGAAGCCAGACTTCAGCAGCCAGCCGGCTGTGCAACAAGCTGA
CCAAACGTATCCCCTGCGGAGACAGGTTTCGGCTGAGTCCAGCTCCTCCATGAACTCCAACACCCCGCT
GGTGGAGATAACAACACGCCTCTCTTCAACGGCAGACACCCCATGCTGGCAGGGGTCTCCGAGTATGAA
CTTCCAGAGGACCAAAATGGGAGTTTCCAAGAGATAAGCTGACACTGGCAAGCCCTGGGAGAAGGTT
GCTTTGGCAAGTGGTCATGGCGGAAGCAGTGGGAATTGACAAAGACAAGCCCAAGGAGGCGGTACCCGT
GGCCGTGAAGATGTTGAAAGATGATGCCACAGAGAAAGACCTTCTGATCTGGTGTGAGAGATGGAGATG
ATGAAGATGATTGGAAACACAAGAATATCATAAATCTTGGAGCCTGCACACAGGATGGCCCTCTCT
ATGTCATAGTTGAGTATGCCTCTAAAGGCAACCTCCGAGAATACCTCCGAGCCGGAGGCCACCCGGGAT
GGAGTACTCCTATGACATTAACCGTGTCTGAGGAGCAGATGACCTTCAAGACTTGGTGTGATGCACC
TACCAGCTGGCCAGAGGCATGGAGTACTTGGCTTCCAAAAATGTATTATCGAGATTTAGCAGCCAGAA
ATGTTTTGGTAACAGAAAACAATGTGATGAAAATAGCAGACTTTGGACTCGCCAGAGATATCAACAATAT
AGACTATTAAAAAGACCACCAATGGGCGCTTCCAGTCAAGTGGATGGCTCCAGAAGCCCTGTTTGTAT
AGAGTATACACTCATCAGAGTGTCTGGTCTTCCGGGTGTTAATGTGGGAGATCTTCACTTTAGGGG
GCTCGCCCTACCCAGGATTCCTGGAGGAACTTTTAAGCTGCTGAAGGAAGGACACAGAATGGATAA
GCCAGCCAACGCACCAACGAAGTACATGATGATGAGGACTGTTGGCATGCAGTGCCTCCCAGAGA
CCAACGTTCAAGCAGTTGGTAGAAGACTTGGATCGAATCTCACTCTCACAAACCAATGAGGAATACTTGG
ACCTCAGCCAACCTCTCGAACAGTATTCACCTAGTTACCCTGACACAAGAAGTTCTTGTCTTCAGGAGA
TGATTCTGTTTTTCTCCAGACCCCATGCCTTACGAACCATGCCTTCTCAGTATCCACACATAAACGGC
AGTGTTAAACATGA
    
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5' Read Nucleotide Sequence:

>OriGene 5' read for mutant BC039243 unedited

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CCCGCCGTTGAGCAATGGGCGGTAGGCGTGTACGGTGGGAGGTCTATATAAGCAGAGCTCGTTTAGTGAA
CCGTGAGAAATTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGGCACGAGGTACGCGTGAAGCCC
GGGAGGCTTGGCCCGGCGAAGACCCAAGGACCACTTCTCTGCGTTTGGAGTTGCTCCCAACACCCCGG
GCTCGTCGCTTTCTCATCCCGACCCACGCGGGGCGGGGACAACACAGGTGCGGAGGAGCGTTGCCA
TTCAAGTGACTGCAGCAGCAGCGGCAGCGCCTCGGTTCTGAGCCACCCGAGGCTGAAGGCATGTGCGG
GGTAGTCCCATGCCCCTAGAGGAAGTGTGCAGATGGGATTTAACGTCCACATGGGAGATATGGAAGAAGG
ACCGGGGATTGGTACCCGTACCCATGGTCAGCTGGGGTCGTTTTATCTGCTTGTCCGTGGTCACCATGG
GCAACCTTGTCCCTGCCCGGCCCTCCTCAGTTTTAGTTGAGGATACACATTGAACCCGAAGGGACCCC
CAACCTGGAACCAACCGAAAAAGTGGAAAACGCGCTCCTGGCTGTGCCTCGGCCACACACAGGTCAGTTT
CGCGCCACAGCGGGGGAACCCATGCCACACTGCGGTGCTGTGAAACGGAGAGAGTTAAACCGAGCTCTC
CTTTGAGTCACGTGCAAACCGACTGGGCCTCTATTGAAGTGGGCCATTCCAGCACTATCCGTGTGGGAAA
TATCGTCTAACCATTTCAATGAATGTGAAGAGCACAGCCCA
    
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Kinase Domain Sequence:	>SC323649 kinase domain raw sequence. By performing BLASTX analysis with this sequence against NCBI reference protein database, you can confirm the presence of the kinase-deficient mutation GRTGCTTTGGCAGTGGTCATGGCGGAGCAGTGGGAATTGACAAAGACAAGCCCAAGGAGGCGGTACCCGT GGCCGTGATGATGTTGAAAGATGATGCCACAGAGAAAGACCTTTCTGATCTGGTGCAGAGATGGAGATG ATGAAGATGATTGGGAAACACAAGAATATCATAAATCTTCTTGGAGCCTGCACACAGGATGGGCCTCTCT ATGTCATAGTTGAGTATGCCTCTAAAGGCAACCTCCGAGAATACC
Restriction Sites:	Please inquire
ACCN:	BC039243
Insert Size:	3900 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:	<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.
RefSeq:	BC039243.1 , AAH39243.2
RefSeq Size:	3575 bp
RefSeq ORF:	2115 bp
Locus ID:	2263
Cytogenetics:	10q26.13
Protein Families:	Druggable Genome, Protein Kinase, Secreted Protein, Transmembrane
Protein Pathways:	Endocytosis, MAPK signaling pathway, 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 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 is a high-affinity receptor for acidic, basic and/or keratinocyte growth factor, depending on the isoform. Mutations in this gene are associated with Crouzon syndrome, Pfeiffer syndrome, Craniosynostosis, Apert syndrome, Jackson-Weiss syndrome, Beare-Stevenson cutis gyrata syndrome, Saethre-Chotzen syndrome, and syndromic craniosynostosis. Multiple alternatively spliced transcript variants encoding different isoforms have been noted for this gene. [provided by RefSeq, Jan 2009]