

Product datasheet for SC325289

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FGFR2 (NM_001144918) Human Untagged Clone

Product data:

Product Type: Expression Plasmids

Product Name: FGFR2 (NM_001144918) Human Untagged Clone

Tag: Tag Free
Symbol: FGFR2

Synonyms: BBDS; BEK; BFR-1; CD332; CEK3; CFD1; ECT1; JWS; K-SAM; KGFR; TK14; TK25

Vector: <u>pCMV6 series</u>





Fully Sequenced ORF:

>NCBI ORF sequence for NM_001144918, the custom clone sequence may differ by one or more nucleotides

ATGGTCAGCTGGGGTCGTTTCATCTGCCTGGTCGTGGTCACCATGGCAACCTTGTCCCTG GCCCGGCCCTCCTTCAGTTTAGTTGAGGATACCACATTAGAGCCAGAAGGAGCACCATAC TGGACCAACACAGAAAAGATGGAAAAGCGGCTCCATGCTGTGCCTGCGGCCAACACTGTC AAGTTTCGCTGCCCAGCCGGGGGAACCCAATGCCAACCATGCGGTGGCTGAAAAACGGG AAGGAGTTTAAGCAGGAGCATCGCATTGGAGGCTACAAGGTACGAAACCAGCACTGGAGC CTCATTATGGAAAGTGTGGTCCCATCTGACAAGGGAAATTATACCTGTGTAGTGGAGAAT GAATACGGGTCCATCAATCACACGTACCACCTGGATGTTGTGGAGCGATCGCCTCACCGG CCCATCCTCCAAGCCGGACTGCCGGCAAATGCCTCCACAGTGGTCGGAGGAGACGTAGAG TTTGTCTGCAAGGTTTACAGTGATGCCCAGCCCCACATCCAGTGGATCAAGCACGTGGAA AAGAACGGCAGTAAATACGGGCCCGACGGGCTGCCCTACCTCAAGGTTCTCAAGGCCGCC GGTGTTAACACCACGGACAAAGAGATTGAGGTTCTCTATATTCGGAATGTAACTTTTGAG GACGCTGGGGAATATACGTGCTTGGCGGGTAATTCTATTGGGATATCCTTTCACTCTGCA TGGTTGACAGTTCTGCCAGCGCCTGGAAGAGAAAAGGAGATTACAGCTTCCCCAGACTAC CTGGAGATAGCCATTTACTGCATAGGGGTCTTCTTAATCGCCTGTATGGTGGTAACAGTC CACAAGCTGACCAAACGTATCCCCCTGCGGAGACAGGTTTCGGCTGAGTCCAGCTCCTCC ATGAACTCCAACACCCCGCTGGTGAGGATAACAACACGCCTCTCTTCAACGGCAGACACC CCCATGCTGGCAGGGGTCTCCGAGTATGAACTTCCAGAGGACCCAAAATGGGAGTTTCCA AGAGATAAGCTGACACTGGGCAAGCCCCTGGGAGAAGGTTGCTTTGGGCAAGTGGTCATG GCGGAAGCAGTGGGAATTGACAAAGACAAGCCCAAGGAGGCGGTCACCGTGGCCGTGAAG ATGTTGAAAGATGATGCCACAGAGAAAGACCTTTCTGATCTGGTGTCAGAGATGGAGATG ATGAAGATGATTGGGAAACACAAGAATATCATAAATCTTCTTGGAGCCTGCACACAGGAT GGGCCTCTCTATGTCATAGTTGAGTATGCCTCTAAAGGCAACCTCCGAGAATACCTCCGA GCCCGGAGGCCACCCGGGATGGAGTACTCCTATGACATTAACCGTGTTCCTGAGGAGCAG ATGACCTTCAAGGACTTGGTGTCATGCACCTACCAGCTGGCCAGAGGCATGGAGTACTTG GCTTCCCAAAAATGTATTCATCGAGATTTAGCAGCCAGAAATGTTTTGGTAACAGAAAAC AATGTGATGAAAATAGCAGACTTTGGACTCGCCAGAGATATCAACAATATAGACTATTAC AAAAAGACCACCAATGGGCGGCTTCCAGTCAAGTGGATGGCTCCAGAAGCCCTGTTTGAT AGAGTATACACTCATCAGAGTGATGTCTGGTCCTTCGGGGTGTTAATGTGGGAGATCTTC ACTTTAGGGGGCTCGCCCTACCCAGGGATTCCCGTGGAGGAACTTTTTAAGCTGCTGAAG GAAGGACACAGAATGGATAAGCCAGCCAACTGCACCAACGAACTGTACATGATGATGAGG GACTGTTGGCATGCAGTGCCCTCCCAGAGACCAACGTTCAAGCAGTTGGTAGAAGACTTG GATCGAATTCTCACTCTCACAACCAATGAGGAATACTTGGACCTCAGCCAACCTCTCGAA CAGTATTCACCTAGTTACCCTGACACAAGAAGTTCTTGTTCTTCAGGAGATGATTCTGTT TTTTCTCCAGACCCCATGCCTTACGAACCATGCCTTCCTCAGTATCCACACATAAACGGC **AGTGTTAAAACA**

Restriction Sites: Please inquire ACCN: NM 001144918

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 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.



FGFR2 (NM_001144918) Human Untagged Clone - SC325289

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 001144918.1</u>, <u>NP 001138390.1</u>

 RefSeq Size:
 4303 bp

 RefSeq ORF:
 2115 bp

 Locus ID:
 2263

 UniProt ID:
 P21802

 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]

Transcript Variant: This variant (8) is missing two consecutive in-frame coding exons, and uses an alternate in-frame donor splice site at another coding exon, compared to transcript variant 1. This results in a shorter isoform (8) lacking an internal protein segment and additional 2 aa, compared to isoform 1. Sequence Note: A downstream AUG translation start codon is selected for this RefSeq based on the presence of a strong Kozak consensus signal, a strong community standard for the use of the downstream start codon, and on a higher probability of an N-terminal signal peptide being present in the resulting protein. The use of an alternative in-frame upstream AUG start codon would result in a protein that is 19 aa longer at the N-terminus. Translation from the annotated downstream start codon is likely to occur via leaky scanning and/or reinitiation.