

Product datasheet for **SC310101**

FGFR3 (NM_000142) Human Untagged Clone

Product data:

Product Type: Expression Plasmids
Product Name: FGFR3 (NM_000142) Human Untagged Clone
Tag: Tag Free
Symbol: FGFR3
Synonyms: ACH; CD333; CEK2; HSFGR3EX; JTK4
Mammalian Cell Selection: None
Vector: [pCMV6-XL5](#)
E. coli Selection: Ampicillin (100 ug/mL)

Fully Sequenced ORF: >OriGene ORF sequence for NM_000142 edited
 GAATTCGGCACGAGGTCGCGGGCAGCTGGCGCCGCGGGTCTGCTCTGCCGGTCCGACG
 GACGCACCGGCGGGCCCGGCCGAGGGACGGGGCGGGAGCTGGGCCCGGACAGCGA
 GCCGGAGCGGGAGCCGCGCTAGCGAGCCGGGCTCCGGCGCTCGCCAGTCTCCCGAGCGG
 CGCCCGCTCCCGCGGTGCCCGCGCGGGCCGTGGGGGACGATGCCCGCGCGCTG
 CCTGAGGACGCCGCGCCCGCCCGCCATGGGCGCCCTGCCTGCGCCCTCGCGCTC
 TCGGTGGCCGTGGCCATCGTGGCCGGCCCTCCTCGGAGTCTTGGGACGGAGCAGCGC
 GTCGTGGGGGAGCGGCAGAAGTCCCGGGCCAGAGCCCGGCCAGCAGGAGCAGTTGGTC
 TTCGGCAGCGGGATGCTGTGGAGCTGAGCTGTCCCCCGCGGGGTGGTCCCATGGG
 CCCACTGTCTGGGTCAAGGATGGCACAGGGCTGGTGCCTCGGAGCGTGTCTGGTGGG
 CCCAGCGGCTGCAGGTGCTGAATGCCTCCACAGGACTCCGGGGCCTACAGCTGCCGG
 CAGCGGCTCACGACGCGTACTGTGCCACTTCAAGTGTGCGGGTACAGAGCCTCCATCC
 TCGGGAGATGACGAAGACGGGGAGGACGAGGCTGAGGACACAGGTGTGGACACAGGGCC
 CCTTACTGGACACGGCCCGAGCGGATGGACAAGAAGCTGTGGCCGTGCCGGCCGCAAC
 ACCGTCCGCTTCCGCTGCCAGCCGCTGGCAACCCCACTCCCTCCATCTCCTGGTGAAG
 AACGGCAGGGAGTTCCGCGGCGAGCACCATTGGAGGCATCAAGCTGCGGCATCAGCAG
 TGGAGCCTGGTCAAGAAAGCGTGGTGCCTCGGACCGCGGCAACTACACCTGCGTCGTG
 GAGAACAAGTTTGGCAGCATCCGGCAGACGTACACGCTGGACGTGCTGGAGCGTCCCCG
 CACCGCCCATCCTGACGGCGGGGCTGCCGGCAACCAGACGGCGGTGCTGGGACGGCAG
 GTGGAGTTCCACTGCAAGGTGTACAGTGACGCACAGCCCAACATCAAGTGGCTCAAGCAC
 GTGGAGGTGAATGGCAGCAAGGTGGGCCCGGACGGCACACCCCTACGTTACCGTGCTCAAG
 ACGGCGGGCGCTAACACCACGACAAGGAGCTAGAGGTTCTCTCCTTGACAACGTCAAC
 TTTGAGGACGCCGGGAGTACACCTGCCTGGCGGGCAATTCTATTGGGTTTTCTCATCAC
 TCTGCGTGGTGGTGGTGTGCCAGCCGAGGAGGAGCTGGTGGAGGCTGACGAGGCGGGC
 AGTGTGTATGCAGGCATCCTCAGCTACGGGGTGGGCTTCTTCTGTTTCATCCTGGTGGT
 GCGGCTGTGACGCTTCCCGCTGCGCAGCCCCCAAGAAAGGCTGGGCTCCCCCACC
 GTGCACAAGATCTCCCGTCCCGCTCAAGCGACAGGTGTCCCTGGAGTCCAACGCGTCC



[View online >](#)

```

ATGAGCTCCAACACACCACTGGTGCGCATCGCAAGGCTGTCCTCAGGGGAGGGCCCCACG
CTGGCCAATGTCTCCGAGCTCGAGCTGCCTGCCGACCCCAATGGGAGCTGTCTCGGGCC
CGGCTGACCTGGGCAAGCCCCTTGGGGAGGGCTGCTTCGGCCAGGTGGTGCATGGCGGAG
GCCATCGGCATTGACAAGGACCGGGCCGCAAGCCTGTACCCTGAGCCGTGAAAGATGCTG
AAAGACGATGCCACTGACAAGGACCTGTGCGACCTGGTGTCTGAGATGGAGATGATGAAG
ATGATCGGCAAAACAAAAACATCATCAACCTGCTGGGCGCCTGCACGCAGGGCGGGCCC
CTGTACGTGCTGGTGGAGTACGCGGGCAAGGGTAACCTGCGGGAGTTTCTGCGGGCGCGG
CGGCCCCCGGGCCTGGACTACTCCTTCGACACCTGCAAGCCGCCGAGGAGCAGCTCACC
TTCAAGGACCTGGTGTCTGTGCTACCAAGGTGGCCCGGGCATGGAGTACTTGGCTCC
CAGAAGTGCATCCACAGGGACCTGGCTGCCCGAATGTGCTGGTGACCGAGGACAACGTG
ATGAAGATCGCAGACTTCGGGCTGGCCCGGACGTGCACAACCTCGACTACTACAAGAAG
ACAACCAACGCGCGCTGCCCGTGAAGTGGATGGCGCCTGAGGCCTTGTGGACCGAGTC
TACACTCACCAGAGTGACGTCTGGTCTTTGGGTCTGCTCTGGGAGATCTTACGCTG
GGGGGCTCCCCGTACCCCGCATCCCTGTGGAGGAGCTTCAAGCTGCTGAAGGAGGGC
CACCGCATGGACAAGCCCGCAACTGCACACACGACCTGTACATGATCATGCGGGAGTGC
TGGCATGCCGCGCCTCCAGAGGCCACCTTCAAGCAGCTGGTGGAGGACCTGGACCGT
GTCCTTACCGTGACGTCCACCGACGAGTACCTGGACCTGTGCGGCCCTTCGAGCAGTAC
TCCCCGGGTGGCCAGGACACCCCGAGCTCCAGCTCCTCAGGGGACGACTCCGTGTTTGC
CACGACCTGTGCCCCCGGCCACCCAGCAGTGGGGGCTCGCGGACGTGAAGGGCCACT
GGTCCCCAACAAATGTGAGGGGTCCCTAGCAGCCACCCCTGCTGCTGGTGCACAGCCACTC
CCCGCATGAGACTCAGTGCAGATGGAGAGACAGCTACACAGAGCTTTGGTCTGTGTGTG
TGTGTGTGCGTGTGTGTGTGTGTGCACATCCGCGTGTGCTGTGTGCGTGCATCTT
GCCTCCAGGTGCAGAGGTACCCTGGGTGTCCCGCTGCTGTGCAACGGTCTCCTGACTGG
TGCTGCAGCACCGGAGGGCCTTTGTTCTGGGGGACCCAGTGCAGAATGTAAAGTGGGCC
ACCCGGTGGGACCCCGTGGGGCAGGGAGCTGGGCCGACATGGTCCGGCCTCTGCCTT
TGCACCACGGGACATCACAGGTGGGCCTCGGCCCTCCACACCCAAAGCTGAGCCTGC
AGGGAAGCCCCACATGTCCAGCACCTTGTGCTGGGGTGTAGTGGCACCCGCTCCC

```

5' Read Nucleotide Sequence:

```

>Reverse primer walk for NM_000142 unedited
NNNNAACAAAAANNNAANNNNGCAGGAGGTTGACGCGCTGGGACGCGGAGCGGACGGT
GTTGGCGGCCGGCACGGCCAGCAGCTTCTTGTCCATCCGCTCGGGCCGTGTCCAGTAAGG
GGCCCCGTGTGCCACACCTGTGTCTCAGCCTCGTCTCCCCGTCTTCGTATCTCCCGA
GGATGGAGCGTCTGTACCCGCACACTGAAGTGGCACAGTACGCGCTGCGTGAGCCGCTG
CCGGCAGCTGTAGGCCCGGAGTCTCGTGGGAGGCATTACGACCTGCAGCCGCTGGGG
CCCCACCAGGACACGCTCCGAGGGCACCAGCCCTGTGCCATCCTTGACCCAGACAGTGGG
CCCCATGGGACCACCCCGGGCGGGGGACAGCTCAGCTCCACAGCATCCCCGCTGCCGAA
GACCAACTGCTCCTGCTGCGCGGGCTCTGGGCCCGGGACTTCTGCCGCTCGCCCCAGAC
GGCTGCTCCGTCCCCAAGGACTCCGAGGAGGCGCGGCCACGATGGCCACGGCCACGCA
GAGCGCGAGGGCGCAGGCAGGGGCGCCATGGCGGGGGCGGGGGCCGCGCGCTCCTCAGG
CAGCGCGCGGGCATGTGCCCCCACGGCCCGCGCGGGCACCGCGGGAGGGCGGGCG
CCGCTCGGGAGACTGGCGAGCGCCGGAGCCCGGCTCGCTACGCGCGGCTCCCGCTCCGGC
TCGCTGTCCGCGGGCCAGCTCCCGCCCGTCCCTCCGGCCGGCGGCCCGCGGTGCGTC
CGTGCGACCGGCAGAGCAGGACCGCGCGGCCAGCTGCCCGGACCTCGTGCCGAATTC
GCGGGCGCCCTATAGTGAATCGTATTACAAAATTTGACGGTTCACTAAACAAGCTCTGC
TTATATAGACCTCCACCGTACACGCCTACCGCCATTTGCGTACCGGGCCGGGTTAT
TACGACATTTTGGAAATCCCGTTGATTTTGGTGCCAAACCAAACTCCCATTTGACGTTAAT
GGGGTGGAGACTTGAAAATCCCGTGGATCAAAACCCCTATTCCCCCCCAATTGGTG
TACTTGAAAAACCGCAATCCCATGAAAATAGGGAATAACTAAATCGTATAATTGTTT
CGCCCAAGTAAGGAAAATCCCTAAAGGGCCATGTTCTGGGCAATAAAACCCAGGGC
GGGGGCACATTTCCCTCCATTTGTGACTCTAAAAGGGGGGGCGGATATTTGTAAAT

```

3' Read Nucleotide Sequence:

>OriGene 3' read for NM_000142 unedited
 NNNGGCGAAGCATCAGGGCAGGAAGCACTGGGGAGGGGTACAGGGATGCCACCCGGGAT
 CTGTTCCAGGAAACAGCTATGACCCGGCCCAATCTAGAGTCGAGTTTTTTTTTTTTTTTT
 TTTTTTTTTTTTTTTTTTTTCCAGGTTAGCAACCAGGTGTCTTTATTTTTTCGAAAGTTC
 GTCGCTGGGTTAACAAAAATCGCACCTGCCGTTTGGGTGACACCTCTGGCCACCATGCAC
 TGGGCCCCAAAAAAGACCACCCTGAGCCATGGCCCTGCAGGCAAGCAAGGGACAGCTGC
 CCAAACCTCAGGGCCAGTAACAGTACAAAAACGAACCACTGAATTCACGGCTTCCCTCCA
 AGCTTTGAAAGGTAGCAGTCCAGGCTATAAACTCTAAAAGCATTGCGTAAAAAGTGTTA
 AGTCTACAACAAATACATCTTGTAAAACTCAATAAATTATATATATAGATATATATAAA
 CTTGTAACATCTAATAACATCGGAACCTGCACACAGGGCCGGCCCTCCCTGAAACCGT
 CTCCTGCCTGGGACACACAGCAATTAGAAAAATTTGTATGAAAAATACCAGCTTGCTTTG
 AAGTCCAAAAATAAATCTCCTAAAGAAAAATCCTATAGAAATCTAATTCTCTGAAAAA
 GGACAAAGGAAATAAATATCTTCACTGGAATCACCTCCAATTAACAACCTTTTAGG
 CTTGGAGGGGATCTCCAGCTCCGGGGCAGGCTGGACGTACATTCTTGGCCGTCCTCTA
 TCGGGCGGATAAACCTTCTCGGTTGTCAATAAGTTAAAAATTAACCTCTCCGCCATGTG
 GCCAGCTAAATGCTGGAAGTGTGGGGGTGGGGGAACAAAAGTGCCAGGGGCCATAAAT
 AGCTTTACAATATACAGGGTCAGTTTTAAACAAAACCTGCGGGCCAGAAAAAGCCCTGG
 TCCTCTGCTTGCAAGGGGTGAGACCCCCTGGGGCCCTCCCTCAAGGCCCCCAAGCCCCG
 GCCAAGGGCCATGCTGGCCTCTGTGCCCCAGGGTCGCAAGCCCTCCGTTTGACCAC
 CCTTTTTCCCCTCAAAAAAGGGTAAAAAANAAGGAAAAAACCANAAACCCCCTCT
 TTTTTAAAGAAAGGGACCTAATTTTCGGGAAAAACCTTTGAAAAAAGGGAAAAGGCC
 CCCTCTCCGGGACCCCGAATTTCACTCTAAGGGCAGGGTGGGGAAAGGGAAACCCGCG
 GAGGGGGGAGGGGGGCCCAACACCCCGGGAGT

Restriction Sites:

Please inquire

ACCN:

NM_000142

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:

There are 2 nucleotide differences between the OriGene clone and the NCBI reference ORF. OriGene considers these to be polymorphisms and to reflect the natural differences between individuals. These result in the substitution of no amino acids.

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_000142.2](#), [NP_000133.1](#)

RefSeq Size: 4304 bp

RefSeq ORF: 2421 bp

Locus ID: 2261

UniProt ID: [P22607](#)

Cytogenetics: 4p16.3

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

Protein Families: Druggable Genome, Protein Kinase, Transmembrane

Protein Pathways: Bladder cancer, Endocytosis, MAPK signaling pathway, Pathways in cancer, Regulation of actin cytoskeleton

Gene Summary: This gene encodes a member of the fibroblast growth factor receptor (FGFR) family, with its amino acid sequence being highly conserved between members and among divergent species. FGFR family members differ from one another in their ligand affinities and tissue distribution. A full-length representative protein would consist 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 acidic and basic fibroblast growth hormone and plays a role in bone development and maintenance. Mutations in this gene lead to craniosynostosis and multiple types of skeletal dysplasia. [provided by RefSeq, Aug 2017]

Transcript Variant: This variant (1) lacks an alternate coding exon and contains another alternate coding exon compared to variant 3. The resulting isoform (1) has the same N- and C-termini but is shorter compared to isoform 3. Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.