

Product datasheet for **MG226920**

Fgfr3 (NM_001163217) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Fgfr3 (NM_001163217) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Fgfr3
Synonyms:	CD333; Fgfr-; Fgfr-3; Flg-2; FR3; HBGF; HBGFR; Mfr3; sa; sam3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>MG226920 representing NM_001163217
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGTAGTCCCGCCTGCGTGCTAGTGTCTGCGTGGCGGTCGTGGCTGGAGCTACTTCCGAGCCTCCTG
 GTCAGAGCAGCGAGTTGTGCGGAGAGCGGCAGAGGTTCCAGGGCCTGAACCTAGCCAGCAGGAGCAGGT
 GGCTTCCGGCAGTGGGGACACCGTGGAGCTGAGCTGCCATCCTCCTGGAGGTGCCCCACAGGGCCACG
 GTCTGGGCTAAGGATGGTACAGGTCTGGTGGCCTCCACCGCATCCTGGTGGGCGCTCAGAGGCTGCAAG
 TGCTAAATGCCTCCACGAAGATGCAGGGGTCTACAGCTGCCAGCACCAGGCTCACTCGGCGTGTGCTGTG
 CCCTTCACTGTGCGTGTAAACAGATGCTCCATCCTCAGGAGATGACGAAGATGGGAGGACGTGGCTGAA
 GACACAGGGGCTCCTTATTGGACTCGCCCGAGCGAATGGATAAGAACTGCTGGCTGTGCCAGCCGCAA
 AACTGTCCGCTCCGCTGCCAGCTGCTGGCAACCTACCCCTCCATCTCCTGGCTGAAGAATGGCAA
 AGAATCCGAGGGGAGCATCGCATTGGGGGCATCAAGCTCCGGCACCAGCAGTGGAGCTTGGTCATGGAA
 AGTGTGGTACCCTCCGATCGTGGCAACTATACCTGTGTAGTTGAGAACAAGTTTGGCAGCATCCGGCAGA
 CATAACACTGGATGTGCTGGAGCGCTCCACACCCGGCCATCCTGCAGGCTGGGCTGCCGGCCAAACCA
 GACAGCCATTCTAGGCAGTGACGTGGAGTTCCTGCAAGGTGTACAGCGATGCACAGCCACACATCCAG
 TGGCTGAAGCAGTGAAGTGAACGGCAGCAAGGTGGGCGCTGACGGCAGCCCTACGCTACTGTACTCA
 AGTCTGGATCAGTGAGAATGTGGAGGCAGACGACGCTCCGCTGGCCAATGTGTGGAGCGGGACGG
 GGGCGAGTACCTCTGTCGAGCCACCAATTCATAGGCGTGGCTGAGAAGGCCCTTTGGCTGCGTGTTCAC
 GGGCCCAAGCAGCTGAGGAGGAGCTGATGAACTGATGAGGCTGGCAGCGTGTACGACAGGCGTCTCA
 GCTACGGGGTGGTCTTCTCCTCTTATCCTGGTGGCAGCTGTGACTCTGCCGCTGCCGAGGTTCC
 CCCAAAGAAGGGCTTGGGCTCGCCACCGTGCACAAGGTCTCTCGCTTCCCGCTTAAGCGACAGGTGTCC
 TTGGAATCTAACTCCTCTATGAACTCCAACACACCCCTTGTCCGATTGCCCGGCTGTCTCAGGAGAAG
 GTCCTGTCTGGCCAATGTTTCTGAACTTGAGCTGCCTGCTGACCCCAAGTGGGAGCTATCCAGGACCCG
 GCTGACACTTGGTAAGCCTCTTGGAGAAGGCTGCTTGGACAGGTGGTCAATGGCAGAAGCTATTGGCATC
 GACAAGGACCGTACTGCCAAGCCTGTACCCTGGCCGTGAAGATGCTGAAAGATGATGCGACTGACAAGG
 ACCTGTCCGACCTGGTATCTGAGATGGAGATGATGAAAATGATTGGCAAGCACAAGAATCATTAACT
 GCTGGGGCGTGCACACAGGGTGGGCCCTGTATGTGCTGGTGGAGTACGCAGCCAAGGGCAATCTCCGG
 GAGTTCCTTCGGCGCGGCGGCCCTCCAGGCATGGACTACTCCTTTGATGCCTGCAGGCTGCCAGAGGAAC
 AGCTCACCTGCAAGGATCTAGTGTCTGTGCCTACCAGGTGGCAGGGGCATGGAATACTTGGCTTCTCA
 GAAGTGTATTACAGAGACTTGGCTGCCAGAAACGTCCTGGTGACCGAGGACAATGTGATGAAGATTGCG
 GACTTTGGCCTGGCTCGAGATGTGCACAACCTGGACTACTACAAGAAGACCACAAATGGCCGGCTACCTG
 TGAAGTGGATGGCACCAGAGGCCCTTTTGACCGAGTCTACCCACCAGAGTGTATTTGGTCTTTTGG
 TGTCTCCTCTGGGAGATCTTTACGCTGGGGGGCTCACCGTATCCTGGCATCCAGTGGAAAGAGCTTTTC
 AAGCTGTTGAAAGAGGGCCACCGCATGGACAAGCCAGCCAGCTGCACACATGACCTGTACATGATCATGC
 GGAATGTTGGCATGCGGTGCCTTACAGAGGCCACCTTCAAGCAGTTGGTAGAGGATTTAGACCGCAT
 CCTCACTGTGACATCAACCGACGAGTACTTGGACCTCTCCGTGCCGTTTGGAGCAGTACTCGCCAGGTGGC
 CAGGACACGCCTAGCTCCAGCTCGTCCGAGAGATGACTCGGTGTTACCCATGACCTGCTACCCCAAGGTC
 CACCCAGTAACGGGGACCTCGGACG

ACCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >MG226920 representing NM_001163217
Red=Cloning site Green=Tags(s)

MVVPACVLVFCVAVVAGATSEPPGPEQRVVRRAAEVPGPEPSQQEQVAFGSGDTVELSCHPPGGAPTGPT
VWAKDGTGLVASHRILVGPQRLQVLNASHEDAGVYSCQHRLTRRVLCHF SVRVTDAPSSGDDEDGEDVAE
DTGAPYWTRPERMDKLLAVPAANTVFRFCPAAGNPTPSISWLKNGKEFRGEHRIGGIKLRHQWLSLME
SVVPSDRGNYTCVVENKFGSIRQTYTLDVLESPHRPILQAGLPANQTALIGSDVEFHCKVYSDAQPHIQ
WLKHVEVNGSKVGPDPGTPYVTVLKSWISENVEADARLRLANVSERDGGEYLCRATNFIVAEKAFWLRVH
GPQAAEEELMETDEAGSVYAGVLSYGVVFFLILVVAAILCRLRSPKKGSGSPTVHKVSRFPLKRQVS
LESNSSMNSNTPLVRIARLSSGEGPVLANVSELELPADPKWELSRTRLTLGKPLGEGCFGQVMAEAIIGI
DKDRTAKPVTVAVKMLKDDATDKDLSDLVSEMEMMKMIGKHNIINLLGACTQGGPLYVLVEYAAKGNLR
EFLRARRPPGMDYSFDACRLPEEQLTCKDLVSCAYQVARGMEYLASQKCIHRDLAARNVLVTEDNVMKIA
DFGLARDVHNLDYKKTTNGRLPVKWMPEALFDRVYTHQSDVWSFGVLLWEIFTLGGSPYPGIPVEELF
KLLKEGHRMDKPA S C T H D L Y M I M R E C W H A V P S Q R P T F K Q L V E D L D R I L T V T S T D E Y L D L S V P F E Q Y S P G G
Q D T P S S S S S G D D S V F T H D L L P P G P P S N G G P R T

TRTRPLE - GFP Tag - V

Restriction Sites: Sgfl-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:

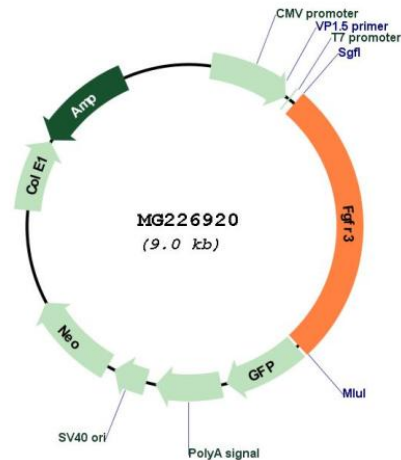


EcoRI BamHI KpnI RBS Kozac Consensus SgfI AscI
 CTATAGGGCGGCCGGGAATTCGTGACTGGATCCGGTACCGAGSAGATCTGCCGCCGATCGCCGGCGCCAGATCT

 HindIII NheI RsrII MluI NotI XhoI GFP Tag
 CAAGCTTAACTAGCTAGCGGACCG ACG CGT ACG CGG CCG CTC GAG ATG GAG AGC GAC --- ---
 T R T R P L E M E S D - - -

 PmeI FseI
 --- GAA GAA AGA GTT TAA ACGGCCGGCCGGGAGCT
 - - E E R V Stop

Plasmid Map:



ACCN: NM_001163217

ORF Size: 2406 bp

OTI Disclaimer: 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: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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_001163217.2](#), [NP_001156689.1](#)

RefSeq Size: 4033 bp

RefSeq ORF: 2409 bp

Locus ID: 14184

Cytogenetics: 5 17.83 cM

Gene Summary:

This gene encodes a member of the fibroblast growth factor receptor family. Members of this family are highly conserved proteins that differ from one another in their ligand affinities and tissue distribution. A 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 family member binds acidic and basic fibroblast growth hormone and plays a role in bone development and maintenance. Mutations in this gene may be associated with craniosynostosis and multiple types of skeletal dysplasia. A pseudogene of this gene is located on chromosome 1. Alternatively spliced transcript variants encoding multiple isoforms have been observed for this gene. [provided by RefSeq, Apr 2011]