

Product datasheet for **MC221994**

Fgfr2 (NM_010207) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Fgfr2 (NM_010207) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Fgfr2
Synonyms:	AU043015; AW556123; Bek; Fgfr-2; Fgfr-7; Fgfr7; KGFR; KGFRTr; sv5
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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Fully Sequenced ORF: >NM_010207.2
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGGATTACCGTCCACGTGGAGATATGGAAGAGGACCAGGGATTGGCACTGTGACCATGGTCAGCTGGG
 GGCCTTCATCTGCCTGGTCTTGGTCACCATGGCAACCTTGTCCCTGGCCCGCCCTCCTTCAGTTTAGT
 TGAGGATACCACTTTAGAACAGAGAGCCACCAACAAATACCAAACTCCCAACCAGAAGCGTACGTG
 GTTGCCCCGGGAATCGCTAGAGTTGCAGTGCATGTTGAAAGATGCCGCGGTGATCAGTTGGACTAAGG
 ATGGGGTGCCTTGGGGCCCAACATAGGACAGTGCTTATTGGGGAGTATCTCCAGATAAAAGGTGCCAC
 ACCTAGAGACTCCGGCTCTATGCTTGTACTGCAGCTAGGACGGTAGACAGTGAAACTTGGTACTTCATG
 GTGAATGTCACAGATGCCATCTCATCTGGAGATGATGAGGACGACACAGATAGCTCCGAAGCGTTGTCA
 GTGAGAACAGGAGCAACCAGAGAGCACCGTACTGGACCAACCCGAGAAGATGGAGAAGCGGCTCCACGC
 TGTCCCTGCCCAACACTGTGAAGTCCGCTGTCCGGCTGGGGGAATCCAACGCCACAATGAGGTGG
 TTAACCAACCGGAAGGAGTTAAGCAGGAGCATCGCATTGGAGGCTATAAGGTACGAAACCAGCACTGGA
 GCCTTATTATGGAAGTGTGGTCCCGTCAGACAAGGCAACTACACCTGCCTGGTGGAGAATGAATACGG
 GTCCATCAACCACACTACCACCTCGATGTCGTTGAACGGTCACCACACCGGCCATCCTCCAAGCTGGA
 CTGCCTGCAATGCCTCCACGGTGGTGGAGGGGATGTGGAGTTTGTCTGCAAGTTTACAGCGATGCC
 AGCCCCACATCCAGTGGATCAAGCACGTGGAAAAGAACGGCAGTAAATACGGGCTGATGGGCTGCCCTA
 CCTCAAGTCTGAAGGCCCGCGGTGTTAACACCACGGACAAAGAGATTGAGGTTCTCTATATTCGGAAT
 GTAACCTTTGAGGATCTGGGGAATACGTGCTTGGCGGTAACTCTATCGGGATACCTTTCAGTCTG
 CATGGTTGACAGTTCTGCCAGCGCTGTGAGAGAGAAGGAGATCACGGCTTCCCCAGATTCTGGAGAT
 AGCTATTTACTGCATAGGGGTCTTCTTAATCGCCTGCATGGTGGTGACAGTCATCTTTGCGCAATGAAG
 ACCACGACCAAGAAGCCAGACTTCAGCAGCCAGCCAGCTGTGCACAAGCTGACCAAGCGCATCCCCCTGC
 GGAGACAGGTAACAGTTTCGGCCGAGTCCAGCTCCTCCATGAACTCCAACACCCCGCTGGTGGAGATAAC
 AACCGCTGTCTCAACAGCGGACACCCCGATGCTAGCAGGGGTCTCCGAGTATGAGTTGCCAGAGGAT
 CCAAAGTGGGAATCCCCAGAGATAAGCTGACGCTGGGCAAAACCCTGGGGGAAGTTGCTTCGGGCAAG
 TAGTCATGGCTGAAGCAGTGGGAATCGATAAAGACAAACCAAGGAGCGGTACCCTGGCAGTGAAGAT
 GTTGAAAGATGATGCCACAGAGAAGACCTGTCTGATCTGGTATCAGAGATGGAGATGATGAAGATGATT
 GGGAAACATAAGAACATTATCAACCTCCTGGGGCCTGCACGCAGGATGGACCTCTACGTCATAGTTG
 AATATGCATCGAAAGGCAACCTCCGGAATAACCTCCGAGCCCGGAGGCCACCTGGCATGGAGTACTCCTA
 TGACATTAACCGTGTCCCGAGGAGCAGATGACCTTCAAGGACTTGGTGTCTGCACCTACCAGCTGGCT
 AGAGGCATGGAGTACTTGGCTTCCAAAAATGTATCCATCGAGATTTGGCTGCCAGAAACGTTGGTAA
 CAGAAAACAAATGTGATGAAGATAGCAGACTTTGGCCTGGCCAGGGATATCAACAACATAGACTACTATAA
 AAAGACCACAAATGGGCGACTCCAGTCAAGTGGATGGCTCCTGAAGCCCTTTTGTAGAGTTTACACT
 CATCAGAGCGATGTCTGGTCTTCGGGTGTTAATGTGGGAGATCTTTACTTTAGGGGGCTACCCTACC
 CAGGGATTCCCGTGGAGGAACTTTTAAGCTGCTCAAAGAGGGACACAGGATGGACAAGCCCAACACTG
 CACCAATGAACTGTACATGATGATGAGGGATTGCTGGCATGCTGTACCCTCACAGAGACCCACATCAAG
 CAGTTGGTCAAGACTTGGATCGAATTCTGACTCTCACAACCAATGAGGAATACTTGGATCTCACCCAGC
 CTCTCGAACAGTATTCTCTAGTTACCCCGACACAAGGAGCTCTTGTCTTCAGGGGACGATTCTGTGTT
 TTCTCCAGACCCCATGCCTTATGAACCCTGTCTGCCTCAGTATCCACACATAAACGGCAGTGTAAAAACA
 TGA

AG**CGGACCG**ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCTGAAGAGGATCTGGCAGCAAATGATA
 TCCTGGATTACAAGGATGACGACGATAAGGTTTAA

Chromatograms: https://cdn.origene.com/chromatograms/ja1377_g07.zip

Restriction Sites: Sgfl-RsrII

ACCN: NM_010207

Insert Size:	2523 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).
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:	NM_010207.2 , NP_034337.2
RefSeq Size:	5223 bp
RefSeq ORF:	2523 bp
Locus ID:	14183
UniProt ID:	P21803
Cytogenetics:	7 F3
Gene Summary:	<p>Tyrosine-protein kinase that acts as cell-surface receptor for fibroblast growth factors and plays an essential role in the regulation of cell proliferation, differentiation, migration and apoptosis, and in the regulation of embryonic development. Required for normal embryonic patterning, trophoblast function, limb bud development, lung morphogenesis, osteogenesis and skin development. Plays an essential role in the regulation of osteoblast differentiation, proliferation and apoptosis, and is required for normal skeleton development. Promotes cell proliferation in keratinocytes and immature osteoblasts, but promotes apoptosis in differentiated osteoblasts. Phosphorylates PLCG1, FRS2 and PAK4. Ligand binding leads to the activation of several signaling cascades. Activation of PLCG1 leads to the production of the cellular signaling molecules diacylglycerol and inositol 1,4,5-trisphosphate. Phosphorylation of FRS2 triggers recruitment of GRB2, GAB1, PIK3R1 and SOS1, and mediates activation of RAS, MAPK1/ERK2, MAPK3/ERK1 and the MAP kinase signaling pathway, as well as of the AKT1 signaling pathway. FGFR2 signaling is down-regulated by ubiquitination, internalization and degradation. Mutations that lead to constitutive kinase activation or impair normal FGFR2 maturation, internalization and degradation lead to aberrant signaling. Over-expressed FGFR2 promotes activation of STAT1.[UniProtKB/Swiss-Prot Function]</p>