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Product datasheet for RC600021

FGFR2 (NM_000141) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	FGFR2 (NM_000141) Human Tagged ORF Clone
Tag:	DDK-His
Symbol:	FGFR2
Synonyms:	BBDS; BEK; BFR-1; CD332; CEK3; CFD1; ECT1; JWS; K-SAM; KGFR; TK14; TK25
Mammalian Cell Selection:	None
Vector:	pCMV6-XL5-DDK-His (PS100068)
E. coli Selection:	Ampicillin (100 ug/mL)

ORF Nucleotide Sequence:

>RC600021 representing leader sequence plus the extracellular domain region of NM_000141
Red=Cloning site Blue=ORF Green=Tags(s)

GTAATACGACTCACTATAGGGCGGCCGCGAATTCGTCGACTGGATCTGGTACCGAGGAGATCCGCCGCCG
GCGCGCCAGATCCCAAGCTTAACTAGCTAGCGGACCGAC

ATGGTCAGCTGGGGTCGTTTCATCTGCCTGGTCGTGGTCACCATGGCAACCTTGTCCCTGGCCCGGCCCT
CCTTCAGTTTAGTTGAGGATACCACATTAGAGCCAGAAGAGCCACCAACCAAATACCAAATCTCTCAACC
AGAAGTGTACGTGGCTGCGCCAGGGGAGTCGCTAGAGGTGCGCTGCCTGTTGAAAGATGCCGCCGTGATC
AGTTGGACTAAGGATGGGGTGCACTTGGGGCCCAACAATAGGACAGTGCTTATTGGGGAGTACTTGCAGA
TAAAGGGCGCCACGCCTAGAGACTCCGGCCTCTATGCTTGTACTGCCAGTAGGACTGTAGACAGTGAAAC
TTGGTACTTCATGGTGAATGTCACAGATGCCATCTCATCCGGAGATGATGAGGATGACACCGATGGTGCG
GAAGATTTTGTCAGTGAGAACAGTAACAACAAGAGAGCACCATACTGGACCAACACAGAAAAGATGGAAA
AGCGGCTCCATGCTGTGCCTGCGGCCAACACTGTCAAGTTTCGCTGCCCAGCCGGGGGGAACCCAATGCC
AACCATGCGGTGGCTGAAAAACGGGAAGGAGTTTAAGCAGGAGCATCGCATTGGAGGCTACAAGGTACGA
AACCAGCACTGGAGCCTCATTATGGAAAGTGTGGTCCCATCTGACAAGGGAAATTATACCTGTGTAGTGG
AGAATGAATACGGGTCCATCAATCACACGTACCACCTGGATGTTGTGGAGCGATCGCCTCACCGGCCCAT
CCTCCAAGCCGGACTGCCGGCAAATGCCTCCACAGTGGTCGGAGGAGACGTAGAGTTTGTCTGCAAGGTT
TACAGTGATGCCCAGCCCCACATCCAGTGGATCAAGCACGTGGAAAAGAACGGCAGTAAATACGGGCCCG
ACGGGCTGCCCTACCTCAAGGTTCTCAAGGCCGCCGGTGTTAACACCACGGACAAAGAGATTGAGGTTCT
CTATATTCGGAATGTAACTTTTGAGGACGCTGGGGAATATACGTGCTTGGCGGGTAATTCTATTGGGATA
TCCTTTCACTCTGCATGGTTGACAGTTCTGCCAGCGCCTGGAAGAGAAAAGGAGATTACAGCTTCCCCAG
ACTACCTGGAG

ACGCGTTCAGGCGACTACAAGGATGACGACGATAAGGGATCTCATCATCACCATCACCATTAATGAGATC
TGGTACCGATATCAAGCTTGTCGACTCTAGA

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Protein Sequence:

>RC600021 representing signal peptide plus the extracellular domain region of NM_000141
Red=Cloning sites Green= DDK and 6XHIS Tags

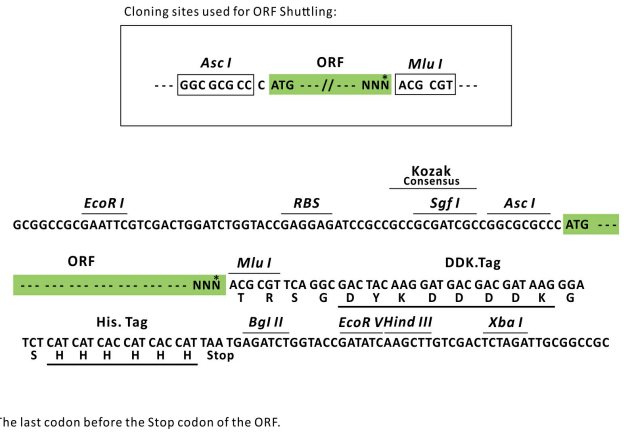
MVSWGRFICLVVVTMATLSLARPSFSLVEDTTLEPEEPPTKYQISQPEVYVAAPGESLEVRCLLKDAAVI
SWTKDGVHLGPNNRTVLIGEYLQIKGATPRDSGLYACTASRTVDSETWYFMVNVTDAISSGDDEDDTDGA
EDFVSENSNNKRAPYWTNTEKMEKRLHAVPAANTVKFRCPAGGNPMPTMRWLKNGKEFKQEHRIGGYKVR
NQHWSLIMESVVPSDKGNYTCVVENEYGSINHTYHLDVVERSPHRPILQAGLPANASTVVGGDVEFVCKV
YSDAQPHIQWIKHVEKNGSKYGPDGLPYLKVLKAAGVNTTDKEIEVLYIRNVTFEDAGEYTCLAGNSIGI
SFHSAWLTVLPAPGREKEITASPDYLE

TRSGTRSGDYKDDDDKGSHHHHHH

Chromatograms: https://cdn.origene.com/chromatograms/mk8117_e02.zip

Restriction Sites: AscI-MluI

Cloning Scheme:



* The last codon before the Stop codon of the ORF.

ACCN: NM_000141

ORF Size: 1131 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 extra cellular domain of the protein 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_000141.4, NP_000132.3
RefSeq Size:	4654 bp
RefSeq ORF:	2466 bp
Locus ID:	2263
UniProt ID:	P21802
Cytogenetics:	10q26.13
Domains:	pkinase, TyrKc, S_TKc, ig, IGc2, IG
Protein Families:	Druggable Genome, Protein Kinase, Secreted Protein, Transmembrane
Protein Pathways:	Endocytosis, MAPK signaling pathway, Pathways in cancer, Prostate cancer, Regulation of actin cytoskeleton
MW:	41.8 kDa
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]