

## Product datasheet for **RG227485**

### **FGFR2 (NM\_001144919) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	FGFR2 (NM_001144919) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	FGFR2
Synonyms:	BBDS; BEK; BFR-1; CD332; CEK3; CFD1; ECT1; JWS; K-SAM; KGFR; TK14; TK25
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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**ORF Nucleotide Sequence:**

>RG227485 representing NM\_001144919  
 Red=Cloning site Blue=ORF Green=Tags(s)

CTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCCGGCGC  
 GCC

ATGGTCAGCTGGGGTCGTTTCATCTGCCTGGTCGTGGTACCATGGCAACCTTGTCCCTGGCCCGCCCT  
 CCTTCAGTTTAGTTGAGGATACACATTAGAGCCAGAAGATGCCATCTCATCCGGAGATGATGAGGATGA  
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 GCACAAGTACCACAACTATCCCCCTGCGGAGACAGGTAACAGTTTCGGCTGAGTCCAGCTCCTCCATG  
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 GCCCTGGGAGAAGGTTGCTTTGGGCAAGTGGTCATGGCGGAAGCAGTGGGAATTGACAAAAGACAAGCCC  
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 GATCTTCACTTTAGGGGGCTCGCCCTACCCAGGGATTCCCGTGGAGGAACTTTTAAGCTGCTGAAGGAA  
 GGACACAGAAATGGATAAGCCAGCCAACCTGCACCAACGAACTGTACATGATGATGAGGGACTGTTGGCATG  
 CAGTGCCTCCCAGAGACCAACGTTCAAGCAGTTGGTAGAAGACTTGGATCGAATTCTCACTCTCACAAC  
 CAATGAGATC

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

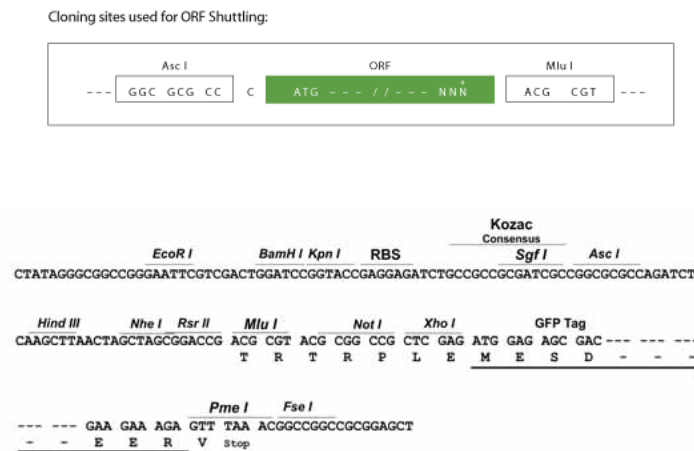
**Protein Sequence:** >RG227485 representing NM\_001144919  
Red=Cloning site Green=Tags(s)

```
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EKMEKRLHAVPAANTVKFRCPAGGNPMPMTMRWLKNGKEFKQEHRIGGYKVRNQHWSLIMESVVP
SDKGNYTCVVENEYGSINHTYHLDVVERSHPHPILQAGLPANASTVVGGDVEFVCKVYSDAQPHI
QWIKHVEKNGSKYGPDGLPYLKV LKHSGINSSNAEVLALFNVTEADAGEYICKVSNYIGQANQSA
WLTVLPKQQAPGREKEITASPDYLEIAIYICIGVFLIACMVVTVILCRMKNTTKKPDFSSQPAV
HKLTKRIPLRRQVTVSAESSSSMNSNTPLVRITRSLSTADTPMLAGVSEYELPEDPKWEFPRDKL
TLGKPLGEGCFGQVMAEAVGIDKDKPKEAVTVAVKMLKDDATEKDLSDLVSEMEMMKMIGKHKNI
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ARGMEYLASQKCIHRDLAARNVLVTENNVMKIADFGLARINNIDYKKTTNGRLPVKWMAP
EALFDRVYTHQSDVWSFGVLMWEIFTLGGSPYPGIPVEELFKLLKEGHRMDKPANCTNELY
MMMRDCWHAVPSQRPTFKQLVEDLDRILTLTTNEI
```

TRTRPLE - GFP Tag - V

**Restriction Sites:** AscI-MluI

**Cloning Scheme:**



**ACCN:** NM\_001144919

**ORF Size:** 2040 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\\_001144919.2](#)

**RefSeq Size:** 3011 bp

**RefSeq ORF:** 2043 bp

**Locus ID:** 2263

**UniProt ID:** [P21802](#)

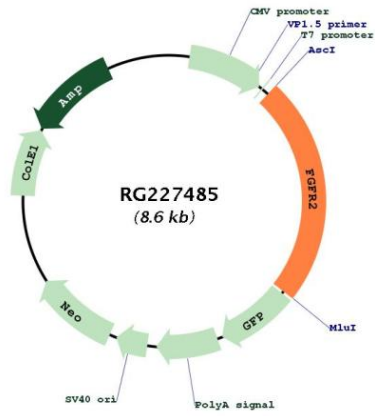
**Cytogenetics:** 10q26.13

**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]

Product images:



Circular map for RG227485