

## Product datasheet for **RC219813**

### FGFR4 (NM\_022963) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	FGFR4 (NM_022963) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	FGFR4
Synonyms:	CD334; JTK2; TKF
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**ORF Nucleotide Sequence:**

>RC219813 representing NM\_022963  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGCGGCTGCTGCTGGCCCTGTTGGGGTCTGCTGAGTGTGCCTGGCCCTCCAGTCTTGTCCCTGGAGG  
 CCTCTGAGGAAGTGGAGCTTGGCCCTGCCTGGCTCCAGCCTGGAGCAGCAAGAGCAGGAGCTGACAGT  
 AGCCCTTGGGCAGCCTGTGCGGCTGTGCTGTGGGCGGGCTGAGCGTGGTGGCCACTGGTACAAGGAGGGC  
 AGTCGCTGGCACCTGCTGGCCGTGTACGGGGTGGAGGGCCGCCTAGAGATTGCCAGTCTCTACCTG  
 AGGATGCTGGCCGCTACCTCTGCCTGGCAGGAGCTCCATGATCGTCTGCAGAACTCACCTTGATTAC  
 AGGTGACTCCTTGACCTCAGCAACGATGATGAGGACCCCAAGTCCCATAGGGACCTCTCGAATAGGCAC  
 AGTTACCCCGCAGCAAGCACCCCTACTGGACACACCCCGAGCGCATGGAGAAGAACTGCATGCAGTACCTG  
 CGGGGAACACCGTCAAGTCCGCTGTCCAGCTGCAGGCAACCCCGCCACCATCCGCTGGCTTAAGGA  
 TGGACAGGCCTTTCATGGGGAGAACCATTGGAGGCATTCGGCTGCGCCATCAGCACTGGAGTCTCGTG  
 ATGGAGAGCGTGGTGCCTCGGACCGCGGCACATACACCTGCCTGGTAGAGAACGCTGTGGGCAGCATCC  
 GTTATAACTACCTGCTAGATGTGCTGGAGCGGTCCCCGACCCGGCCCATCCTGCAGGCGGGCTCCCGGC  
 CAACACCACAGCCGTGGTGGCAGCGAGCTGGAGCTGCTGTGCAAGGTGTACAGCGATGCCAGCCCCAC  
 ATCCAGTGGTGAAGCACATCGTCATCAACGGCAGCAGCTTCGGAGCCGACGGTTTCCCCTATGTGCAAG  
 TCCTAAAGACTGCAGACATCAATAGCTCAGAGGTGGAGGTCTGTACCTGCGGAACGTGTAGCCGAGGA  
 CGCAGGCGAGTACACCTGCCTCGCAGGCAATCCATCGGCCTCTCTACCAGTCTGCCTGGCTCACGGTG  
 CTGCCAGGTACTGGGCGCATCCCCACCTCACATGTGACAGCCTGACTCCAGCAGGCAGAACCAAGTCTC  
 CCATTTGCAGTCTCCCTGGAGTCAGGCTCTTCCGGCAAGTCAAGCTCATCCCTGGTACGAGCGGTGCG  
 TCTCTCTCCAGCGGCCCGCCTTGTCTCGCCGGCCTCGTGAGTCTAGATCTACCTCTCGACCCACTATGG  
 GAGTTCCCCCGGGACAGGCTGGTCTTGGGAAGCCCTAGGCGAGGGCTGCTTTGGCCAGGTAGTACGTG  
 CAGAGGCTTTGGCATGGACCCTGCCCGCCTGACCAAGCCAGCACTGTGGCCGTCAGATGCTCAAAGA  
 CAACGCCTCTGACAAGGACCTGGCCGACCTGGTCTCGGAGATGGAGGTGATGAAGCTGATCGGCCGACAC  
 AAGAACATCATCAACCTGCTTGGTGTCTGCACCCAGGAAGGGCCCTGTACGTGATCGTGGAGTGCGCCG  
 CCAAGGGAACCTGCGGGAGTCTCTGCGGGCCCGCGCCCCCAGGCCCGACCTCAGCCCCGACGGTCC  
 TCGGAGCAGTGGGGCCGCTCTCTTCCAGTCTGGTCTCTGCGCCTACCAGGTGGCCCGAGGCATG  
 CAGTATCTGGAGTCCCGAAGTGTATCCACCGGACCTGGCTGCCCGCAATGTGCTGGTACTGAGGACA  
 ATGTGATGAAGATTGCTGACTTTGGGCTGGCCCGCGGCTCCACCACATTGACTACTATAAGAAAACCAG  
 CAACGGCCGCTGCCTGTGAAGTGGATGGCGCCCGAGGCCTTGTGGTACCAGGCTGTACACACACCAGAGT  
 GACGTGTGGTCTTTGGGATCCTGCTATGGGAGATCTTACCCTCGGGGGCTCCCGTATCCTGGCATCC  
 CGGTGGAGGAGCTGTTCTCGTCTGCGGGAGGGACATCGGATGGACCGACCCCCACACTGCCCCCCAGA  
 GCTGTACGGGCTGATGCGTGAGTGTGGCACGCAGCGCCTCCAGAGGCTACCTCAAGCAGCTGGTG  
 GAGGCGCTGGACAAGTCTGCTGGCCGTCTGTAGGAGTACCTCGACCTCCGCTGACCTTCGGACCT  
 ATTCCCCTCTGGTGGGACGCCAGCAGCACCTGCTCTCCAGCGATTCTGTCTTACGCCAGCCCCCT  
 GCCATTGGGATCCAGTCTTCCCCTTCGGGTCTGGGGTGCAGACA

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >RC219813 representing NM\_022963  
 Red=Cloning site Green=Tags(s)

MRLLLALLGVLLSVPGPPVLSEASEEVELEPCLAPSLEQQEQELTVALGQPVRLCCGRAERGGHWYKEG  
 SRLAPAGRVRGWRGRLEIASFLPEDAGRYLCLARGSMIVLQNLTLITGDSL TSSNDDPKSHRDL SNRH  
 SYPQQAPYWTHPQRMEKKLHAVPAGNTVKFRCPAAGNPTPTIRWLKDGQAFHGENRIGGIRLRHQHWSLV  
 MESVVPSSDRGTYTCLVENAVGSIRYNYLLDVLERSPHRPILQAGLPANTTAVVGSDEVLLCKVYSDAQP  
 IQWLKHIIVINGSSFGADGFYVQVLTADINSSEVEVLYLRNVSAEDAGEYTCLAGNSIGLSYQSAWLT  
 LPGTGRIPHLTCDLSTPAGRTKSPTLQFSLESGSSGKSSSSLVRGVRLSSSGPALLAGLVSLDLPLDPLW  
 EFPRDRLVLGKPLGEGCFQVVRAEAFGMDPARPDQASTVAVKMLKDNASDKDLADLVSEMEVMKLI GRH  
 KNIINLLGVCTQEGPLYVIVECAAKGNLREFLRARRPPGPDLSPDGPRSSEGPLSFPVLVSCAYQVARGM  
 QYLESRKC IHRDLAARNVLTEDNVMKIADFLARGVHHIDYYKKT SNGRLPVKWM APEALFDRVYTHQS  
 DVWSFGILLWEIFTLGGSPYPGIPVEELFSLREGHRMDRPPHCPPELYGLMRECWHAAPSQRPTFKQLV  
 EALDKVLLAVSEEYLDLRLTFGPYSPSGGDASSTCSSSDSVF SHDPLPLGSSSFPGSGVQT

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



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

**ACCN:** NM\_022963

**ORF Size:** 2286 bp

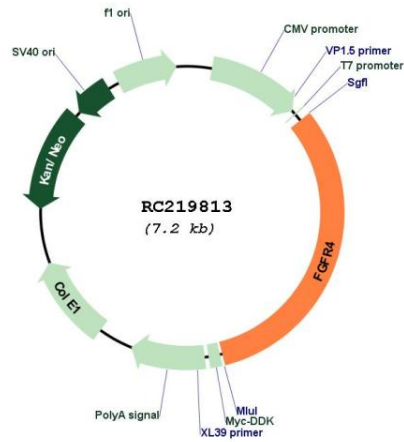
**OTI Disclaimer:** The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone 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.

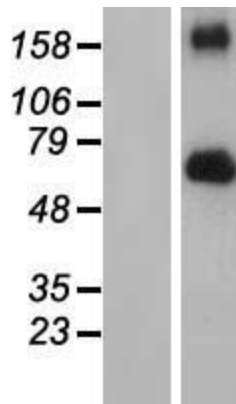
**Components:** The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<a href="#">NM_022963.3</a>
<b>RefSeq Size:</b>	2807 bp
<b>RefSeq ORF:</b>	2289 bp
<b>Locus ID:</b>	2264
<b>UniProt ID:</b>	<a href="#">P22455</a>
<b>Cytogenetics:</b>	5q35.2
<b>Domains:</b>	pkinase, TyrKc, S_TKc, ig, IGc2, IG
<b>Protein Families:</b>	Druggable Genome, Protein Kinase
<b>Protein Pathways:</b>	Endocytosis, MAPK signaling pathway, Regulation of actin cytoskeleton
<b>MW:</b>	80.9 kDa
<b>Gene Summary:</b>	<p>The protein encoded by this gene is a tyrosine kinase and cell surface receptor for fibroblast growth factors. The encoded protein is involved in the regulation of several pathways, including cell proliferation, cell differentiation, cell migration, lipid metabolism, bile acid biosynthesis, vitamin D metabolism, glucose uptake, and phosphate homeostasis. This 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 interacts with fibroblast growth factors, setting in motion a cascade of downstream signals, ultimately influencing mitogenesis and differentiation. [provided by RefSeq, Aug 2017]</p>

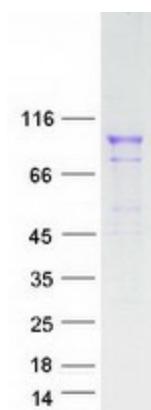
Product images:



Circular map for RC219813



Western blot validation of overexpression lysate (Cat# [LY411457]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC219813 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified FGFR4 protein (Cat# [TP319813]). The protein was produced from HEK293T cells transfected with FGFR4 cDNA clone (Cat# RC219813) using MegaTran 2.0 (Cat# [TT210002]).