

## Product datasheet for **RC600024**

### FGFR3 (NM\_001163213) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	FGFR3 (NM_001163213) Human Tagged ORF Clone
Tag:	DDK-His
Symbol:	FGFR3
Synonyms:	ACH; CD333; CEK2; HSFGR3EX; JTK4
Mammalian Cell Selection:	None
Vector:	pCMV6-XL5-DDK-His (PS100068)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RC600024 representing leader sequence plus the extracellular domain region of NM_001163213 Red=Cloning site Blue=ORF Green=Tags(s)

GTAATACGACTACTATAGGGCGGCCGGAATTTCGTCGACTGGATCTGGTACCGAGGAGATCCGCCGCCG  
CGATCGCC

ATGGGCGCCCTGCCTGCGCCCTCGCGCTCTGCGTGGCCGTGGCCATCGTGGCCGGCGCCTCCTCGGAGT  
CCTTGGGACGGAGCAGCGCGTCTGGGGCAGCGGCAGAAGTCCCGGGCCAGAGCCCGCCAGCAGGA  
GCAGTTGGTCTTCGGCAGCGGGATGCTGTGGAGCTGAGCTGTCCCCCGGGGGTGGTCCCATGGG  
CCCACTGTCTGGGTCAAGGATGGCACAGGGCTGGTGCCTCGGAGCGTGTCTGGTGGGCCCCAGCGGC  
TGCAGGTGCTGAATGCCTCCCACGAGGACTCCGGGGCCTACAGCTGCCGGCAGCGGCTCACGACGCGT  
ACTGTGCCACTTCAGTGTGCGGGTGACAGACGCTCCATCCTCGGGAGATGACGAAGACGGGAGGACGAG  
GCTGAGGACACAGGTGTGGACACAGGGGCCCTTACTGGACACGGCCGAGCGGATGGACAAGAAGCTGC  
TGGCCGTGCCGGCCGAACACCGTCCGCTTCCGCTGCCAGCCGCTGGCAACCCCACTCCCTCCATCTC  
CTGGCTGAAGAACGCGAGGGAGTTCCGCGGCGAGCACCATTGGAGGCATCAAGCTGCGGCATCAGCAG  
TGGAGCCTGGTTCATGAAAGCGTGGTGCCTCGGACCGGGCACTACACCTGCGTCTGGGAGAACAAGT  
TTGGCAGCATCCGGCAGACGTACACGCTGGACGTGCTGGAGCGCTCCCCGACCGGCCATCCTGCAGGC  
GGGGTGGCGCCCAACCAGACGGCGGTGCTGGCAGCGACGTGGAGTTCCACTGCAAGGTGTACAGTGC  
GCACAGCCACATCCAGTGGCTCAAGCACGTGGAGGTGAATGGCAGCAAGGTGGGCCCGGACGGCACAC  
CCTACGTTACCGTGTCAAGTCTGGATCAGTGAAGTGTGGAGGCCGACGTGCGCCTCCGCTGGCCAA  
TGTGTCCGAGCGGACGGGGCGAGTACCTCTGTCCGAGCCACCAATTTATAGGCGTGGCCGAGAAGGCC  
TTTTGGCTGAGCGTTCACGGGCCCGAGCAGCCGAGGAGGAGCTGGTGGAGGCTGACGAGGGCGGACGTG  
TGTATGCAGGC

ACGCGTTCAGGCGACTACAAGGATGACGACGATAAGGGATCTCATCATCACCATCACCATTAATGAGATC  
TGGTACCGATATCAAGCTTGTGACTCTAGA



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**Protein Sequence:** >RC600024 representing signal peptide plus the extracellular domain region of NM\_001163213  
 Red=Cloning sites Green= DDK and 6XHIS Tags

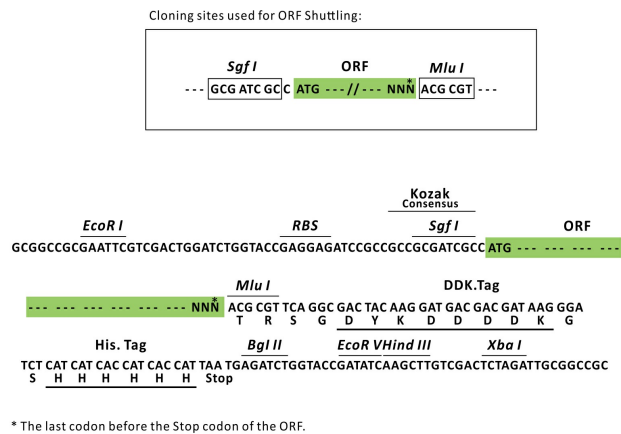
MGAPACALALCVAVAIVAGASSESLGTEQRVVGRAAEVPGPEPGQEQLVFGSGDAVELSCPPPGGGPMG  
 PTVWVKDGTGLVPSERVLVGPQRLQVLNASHEDSGAYSCRQLTQRVLFCHFSVRVTDAPSSGDDDEGEDE  
 AEDTGVDTGAPYWTRPERMDKLLAVPAANTVRFRCPAAGNPTPSISWLKNGREFRGEHRIGGIKLRHQQ  
 WSLVMESVVPDRGNYTCVVENKFGSIRQTYTLDVLESPHRPILQAGLPANQTAVLGSDVEFHCKVYSD  
 AQPFIQWLKHVEVNGSKVGPDPYVTVLKSWISESVEADVRLRLANVSERDGGEYLCRATNFIGVAEKA  
 FWLSVHGPRAAEELVEADEAGSVYAG

TRSGTRSGDYKDDDDKGSHHHHHH

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk8117\\_e05.zip](https://cdn.origene.com/chromatograms/mk8117_e05.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_001163213

**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).

<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>	<u>NM_001163213.1, NP_001156685.1</u>
<b>RefSeq Size:</b>	4310 bp
<b>RefSeq ORF:</b>	2427 bp
<b>Locus ID:</b>	2261
<b>UniProt ID:</b>	<u>P22607</u>
<b>Cytogenetics:</b>	4p16.3
<b>Protein Families:</b>	Druggable Genome, Protein Kinase, Transmembrane
<b>Protein Pathways:</b>	Bladder cancer, Endocytosis, MAPK signaling pathway, Pathways in cancer, Regulation of actin cytoskeleton
<b>MW:</b>	40.5 kDa
<b>Gene Summary:</b>	<p>This gene encodes a member of the fibroblast growth factor receptor (FGFR) family, with its amino acid sequence being highly conserved between members and among divergent species. FGFR family members differ from one another in their ligand affinities and tissue distribution. A full-length representative protein would consist 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 binds acidic and basic fibroblast growth hormone and plays a role in bone development and maintenance. Mutations in this gene lead to craniosynostosis and multiple types of skeletal dysplasia. [provided by RefSeq, Aug 2017]</p>