

## Product datasheet for **RC402591**

### FLT4 (NM\_002020) Human Mutant ORF Clone

#### Product data:

Product Type:	Mutant ORF Clones
Product Name:	FLT4 (NM_002020) Human Mutant ORF Clone
Mutation Description:	H1035Q
Affected Codon#:	1035
Affected NT#:	3105
Nucleotide Mutation:	FLT4 Mutant (H1035Q), Myc-DDK-tagged ORF clone of Homo sapiens fms-related tyrosine kinase 4 (FLT4), transcript variant 2 as transfection-ready DNA
Effect:	Lymphoedema, primary
Symbol:	FLT4
Synonyms:	CHTD7; FLT-4; FLT41; LMPH1A; LMPHM1; PCL; VEGFR-3; VEGFR3
E. coli Selection:	Kanamycin (25 ug/mL)
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
Tag:	Myc-DDK
ACCN:	NM_002020
ORF Size:	3894 bp
Restriction Sites:	Sgfl-Mlul
ORF Nucleotide Sequence:	>RC402591 representing NM_002020 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGCAGCGGGGCGCCGCGCTGTGCCTGCGACTGTGGCTCTGCCTGGGACTCCTGGACGGCCTGGTGAAGT  
GCTACTCCATGACCCCCCGACCTTGAACATCACGGAGGAGTCACACGTCATCGACACCGGTGACAGCCT  
GTCCATCTCCTGCAGGGGACAGCACCCCTCGAGTGGGCTTGGCCAGGAGCTCAGGAGGCCAGCCACC  
GGAGACAAGGACAGCGAGGACACGGGGTGGTGCAGACTGCGAGGGCACAGACGCCAGGCCCTACTGCA  
AGGTGTTGCTGCTGCACGAGGTACATGCCAACGACACAGGCAGCTACGCTGCTACTACAAGTACATCAA  
GGCAGCATCGAGGGCACCGCCGCCAGCTCCTACGTGTTTCGTGAGAGACTTTGAGCAGCCATTATC  
AACAGCCTGACAGCTCTTGGTCAACAGGAAGGACGCCATGTGGGTGCCCTGTCTGGTGTCCATCCCCG



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GCCTCAATGTCACGCTGCGCTCGCAAAGCTCGGTGCTGTGGCCAGACGGGCAGGAGGTGGTGTGGGATGA  
 CCGGCGGGGCATGCTCGTGTCCACGCCACTGCTGCACGATGCCCTGTACCTGCAGTGCAGAGACCCTGG  
 GGAGACCAGGACTTCCTTTCAACCCCTTCTGGTGCACATCACAGGCAACGAGCTCTATGACATCCAGC  
 TGTTGCCCAGGAAGTCTGCTGGAGCTGCTGGTAGGGGAGAAGCTGGTCTGAACTGCACCGTGTGGGCTGA  
 GTTTAACTCAGGTGTACCTTTGACTGGGACTACCCAGGAAGCAGGCAGAGCGGGTAAAGTGGGTGCC  
 GAGCGACGCTCCAGCAGACCCACAGAACTCTCCAGCATCTGACCATCCACAACGTACGCCAGCAGC  
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 TACGCCGATCATGCTGAACTGCTGGTCCGGAGACCCCAAGGCGAGACCTGCATTCTCGGAGCTGGTGA  
 GATCCTGGGGACCTGCTCCAGGGCAGGGCCTGCAAGAGGAAGAGGAGGTCTGCATGGCCCCGCGCAGC  
 TCTCAGAGCTCAGAAGAGGGCAGCTTCTCGCAGGTGTCCACATGGCCCTACACATCGCCAGGCTGACG  
 CTGAGGACAGCCGCCAAGCCTGCAGCGCCACAGCCTGGCCGCCAGGTATTACAAGTGGGTGCTTTCC  
 CGGGTGCCTGGCCAGAGGGGCTGAGACCGTGGTTCCTCCAGGATGAAGACATTTGAGGAATTTCCCATG  
 ACCCCAACGACCTACAAAGGCTCTGTGACAACCAGACAGACAGTGGGATGGTGTGGCCTCGGAGGAGT  
 TTGAGCAGATAGAGAGCAGGCATAGACAAGAAAGCGGCTTCAGG

AGCGGACCGACGCGTACGCGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCC  
 TGGATTACAAGGATGACGACGA TAAGGTTTAA

**Protein Sequence:** >RC402591 representing NM\_002020  
 Red=Cloning site Green=Tags(s)

MQRGAALCLRLWLCGLLDGLVSGYSMTPTLNITEESHVIDTGDSLISICRQHPLEWAWPGAQEAPAT  
 GDKDSEDTGVVRDCEGTDARPYCKVLLLEHVHANDTGSYVCYKYIKARIEGTTAASSYVFVRDFEQPFI  
 NKPDTLLVNRKDAMWVPLVSIPLNVTLSRQSSVLWPDGQEVVWDDRRGMLVSTPLLDHALYLQCETTW  
 GDQDFLSNPFLVHITGNELYDIQLLPRKLELLVGEKLVNCTVWAEFNSGVTFDWDYPGKQAERGKWPV  
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 LVKLPVKLAAYPPPEFQWYKDGKALSGRHSPHALVLKEVTEASTGTYTLALWNSAAGLRRNISLELVVNV  
 PPQIHEKEASSPSIYSRHSRQALTCTAYGVPLPLSIQWHWRPWPCKMFAQRSLRRRQQQLMPQCRDWR  
 AVTTQDAVNPIESLDTWTEFVEGKNKTVSKLVIQNAVNSAMYKCVSNKVGQDERLIYFYVTTIPDGFTI  
 ESKPSEELLEGGQPVLLSCQADSYKYEHLRWYRLNLSTLHDAHGNPLLLDCKNVHLFATPLAASLEEVAPG  
 ARHATLSLSIPRVAPEHEGHYVCEVQDRRSHDKHCHKKYL SVQALEAPRLTQNL TDLLVNVSDSLEMQCL  
 VAGAHAPSIWVYKDERLLEEKSGVDLADSNQKLSIQRVREEDAGRYLCSVCNAKGCVNSSASVAVEGSED  
 KGSMEIVILVGTGVIIVFFWVLLLLIFCNMRRPAHADIKTGYSIIMDPGEVPLEEQCEYL SYDASQWEF  
 PRERLHLGRVLGYGAFGKVVVEASAFGIHKGSSCDTVAVKMLKEGATASEHRALMSELKILIHIGNHLNVV  
 NLLGACTKPQGPLMVIVEFCKYGNLSNFLRAKRDAFSPCAEKSPQGRFRAMVELARLDRRRPGSSDRV  
 LFARFSKTEGGARRASPDQEAEDLWLSPLTMEDLVCYSFQVARGMEFLASRKCIQRDLAARNILLSESDV  
 VKICDFGLARDIYKDPDYVRKGSARLPLKWMAPESIFDKVYTTQSDVWSFGVLLWEIFSLGASPYGVQI  
 NEEFCQRLRDGTRMRAPELATPAIRRIMLNCWSDGPKARPAFSELVEILGDLLQGRGLQEEEEVCMAPRS  
 SQSSEEGSFQVSTMALHIAQADAEDSPPSLQRHSLAARYNWSVFPGLARGAETRGSRRMKTFFEFPM  
 TPTTYKGSVDNQTDSGMVLASEEFEQIESRHRQESGFR

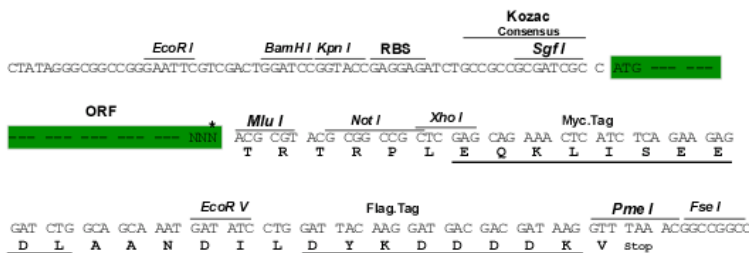
SGPTRRRLEQKLI SEEDLAANDILDYKDDDDKV

**Restriction Sites:**

Sgfl-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shutting:



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

**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](#)

<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<b>Components:</b>	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>Note:</b>	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
<b>RefSeq:</b>	<a href="#">NP_002011</a>
<b>RefSeq Size:</b>	3894 bp
<b>RefSeq ORF:</b>	3897 bp
<b>Locus ID:</b>	2324
<b>Cytogenetics:</b>	5q35.3
<b>Domains:</b>	pkinase, TyrKc, S_TKc, ig, IGc2, IG
<b>Protein Families:</b>	Druggable Genome, Protein Kinase, Transmembrane
<b>Protein Pathways:</b>	Cytokine-cytokine receptor interaction, Focal adhesion
<b>MW:</b>	142.8 kDa
<b>Gene Summary:</b>	This gene encodes a tyrosine kinase receptor for vascular endothelial growth factors C and D. The protein is thought to be involved in lymphangiogenesis and maintenance of the lymphatic endothelium. Mutations in this gene cause hereditary lymphedema type IA. [provided by RefSeq, Jul 2008]