

Product datasheet for **RC402581**

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:	G857R
Affected Codon#:	857
Affected NT#:	2569
Nucleotide Mutation:	FLT4 Mutant (G857R), 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:	SgfI-MluI
ORF Nucleotide Sequence:	>RC402581 representing NM_002020 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGCAGCGGGCGCCGCGCTGTGCCTGCGACTGTGGCTCTGCCTGGGACTCCTGGACGGCCTGGTGA
GCTACTCCATGACCCCCGACCTTGAACATCACGGAGGAGTCACACGTCATCGACACCGGTGACAGCCT
GTCCATCTCCTGCAGGGGACAGCACCCCTCGAGTGGGCTTGGCCAGGAGCTCAGGAGGCCAGCCACC
GGAGACAAGGACAGCGAGGACACGGGGTGGTGCAGACTGCGAGGGCACAGACGCCAGGCCCTACTGCA
AGGTGTTGCTGCTGCACGAGGTACATGCCAACGACACAGGCAGCTACGCTGCTACTACAAGTACATCAA
GGCAGCATCGAGGGCACCGCCGAGCTCCTACGTGTTTCGTGAGAGACTTTGAGCAGCCATTATC
AACAGCCTGACAGCTCTTGGTCAACAGGAAGGACGCCATGTGGGTGCCCTGTCTGGTGCATCCCCG



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GCCTCAATGTCACGCTGCGCTCGCAAAGCTCGGTGCTGTGGCCAGACGGGCAGGAGGTGGTGTGGGATGA
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 GGAGACCAGGACTTCCTTTCAACCCCTTCTGGTGCACATCACAGGCAACGAGCTCTATGACATCCAGC
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 GAGCGACGCTCCAGCAGACCCACAGAAGCTCCAGCATCTGACCATCCACAACGTCAGCCAGCAGC
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 AATGAGGAGTTCTGCCAGCGCTGAGAGACGGCACAAGGATGAGGGCCCCGAGCTGGCCACTCCCGCCA
 TACGCCGATCATGCTGAACTGCTGGTCCGGAGACCCCAAGGCGAGACCTGCATTCTCGGAGCTGGTGA
 GATCCTGGGGACCTGCTCCAGGGCAGGGGCTGCAAGAGGAAGAGGAGTCTGCATGGCCCCGCGCAGC
 TCTCAGAGCTCAGAAGAGGGCAGCTTCTCGAGGTGTCCACATGGCCCTACACATCGCCAGGCTGACG
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AGCGGACCGACGCGTACGCGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCC
 TGGATTACAAGGATGACGACGA TAAGGTTTAA

Protein Sequence: >RC402581 representing NM_002020
 Red=Cloning site Green=Tags(s)

MQRGAALCLRLWLCGLLDGLVSGYSMTPTLNITEESHVIDTGDSLISICRQHPLEWAWPGAQEAPAT
 GDKDSEDTGVVRDCEGTDARPYCKVLLLEHVHANDTGSYVCYKYIKARIEGTTAASSYVFVRDFEQPFI
 NKPDTLLVNRKDAMWVPLVSIPLNVTLSQSQSVLWPDGQEVVWDDRRGMLVSTPLLDHALYLQCETTW
 GDQDFLSNPFLVHITGNELYDIQLLPRKLELLVGEKLVNCTVWAEFNSGVTFDWDYPGKQAERGWVP
 ERRSQQTHTESSILTIHNVSQHDLSYVCKANNGIQRFRESTEIVHENPFISVEWLKGPILEATAGDE
 LVKLPVKLAAYPPPEFQWYKDGKALSGRHSPHALVLKEVTEASTGTYTLALWNSAAGLRRNISLELVVNV
 PPQIHEKEASSPSIYSRHSRQALTCTAYGVPLPLSIQWHWRPWPCKMFAQRSLRRRQQQLMPQCRDWR
 AVTTQDAVNPIESLDTWTEFVEGKNKTVSKLVIQNAVNSAMYKCVSNKVGQDERLIYFYVTTIPDGFTI
 ESKPSEELLEGGQPVLLSCQADSYKYEHLRWYRLNLSTLHDAHGNPLLLDCKNVHLFATPLAASLEEVAPG
 ARHATLSLSIPRVAPEHEGHYVCEVQDRRSHDKHCHKKYL SVQALEAPRLTQNL TDLLVNVSDSLEMQCL
 VAGAHAPSIWVYKDERLLEEKSGVDLADSNQKLSIQRVREEDAGRYLCSVCNAKGCVNSSASVAVEGSED
 KGSMEIVILVGTGVIIVFFWVLLLLIFCNMRRPAHADIKTGYSIIMDPGEVPLEEQCEYL SYDASQWEP
 PRERLHLGRVLGYGAFRKYVVEASAFGIHKGSSCDTVAVKMLKEGATASEHRALMSELKILIHIGNHLNVV
 NLLGACTKPQGPLMVIVEFCKYGNLSNFLRAKRDAFSPCAEKSPQGRFRAMVELARLDRRRPGSSDRV
 LFARFSKTEGGARRASPDQEAEDLWLSPLTMEDLVCYSFQVARGMEFLASRCKIHRDLAARNILLSESDV
 VKICDFGLARDIYKDPDYVRKGSARLPLKWMAPESIFDKVYTTQSDVWSFGVLLWEIFSLGASPYGVQI
 NEEFCQRLRDGTRMRAPELATPAIRIIMLNCWSDGPKARPAFSELVEILGDLLQGRGLQEEEEVCMAPRS
 SSSSEEGSFQVSTMALHIAQADAEDSPPSLQRHSLAARYNWSVFPGLARGAETRGSRRMKTFFEEP
 TPTTYKGSVDNQTDSGMVLASEEFEQIESRHRQESGFR

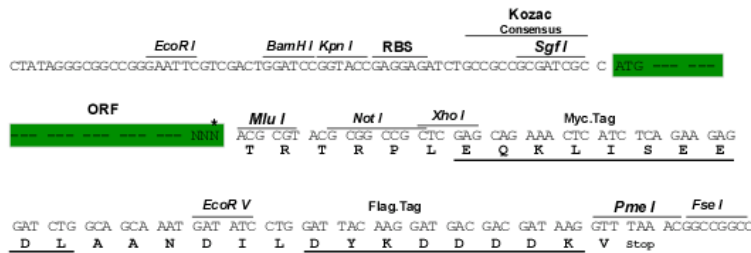
SGP TRRRLEQKLI SEEDLAANDILDYKDDDDKV

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](#)

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).
RefSeq:	<u>NP_002011</u>
RefSeq Size:	3894 bp
RefSeq ORF:	3897 bp
Locus ID:	2324
Cytogenetics:	5q35.3
Domains:	pkinase, TyrKc, S_TKc, ig, IGc2, IG
Protein Families:	Druggable Genome, Protein Kinase, Transmembrane
Protein Pathways:	Cytokine-cytokine receptor interaction, Focal adhesion
MW:	142.8 kDa
Gene Summary:	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]