

Product datasheet for RC402695

FLT3 (NM_004119) Human Mutant ORF Clone

Product data:

Product Type:	Mutant ORF Clones
Product Name:	FLT3 (NM_004119) Human Mutant ORF Clone
Mutation Description:	D324N
Affected Codon#:	324
Affected NT#:	970
Nucleotide Mutation:	FLT3 Mutant (D324N), Myc-DDK-tagged ORF clone of Homo sapiens fms-related tyrosine kinase 3 (FLT3) as transfection-ready DNA
Effect:	Myeloid leukaemia, increased risk, association with
Symbol:	FLT3
Synonyms:	CD135; FLK-2; FLK2; STK1
E. coli Selection:	Kanamycin (25 ug/mL)
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
Tag:	Myc-DDK
ACCN:	NM_004119
ORF Size:	2979 bp
Restriction Sites:	Sgfl-Mlul
ORF Nucleotide Sequence:	>RC402695 representing NM_004119 Red=Cloning site Blue=ORF Green=Tags(s)

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GCC**CGATCGCC**

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TGCTTTACACATTAAGAAGACCTTACTTTAGAAAAATGGAAAACCCAGGACGCCCTGGTCTGCATATCTGA
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Protein Sequence: >RC402695 representing NM_004119
 Red=Cloning site Green=Tags(s)

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VFGQWVSSSTLNMSEA IKGFLVKCCAYNSLGTSCETILLNSPGPFPIQDNISFYATIGVCLLFI VVLT
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SGP TRTRRLEQKLI SEEDLAANDILDYKDDDDKV

Restriction Sites:

Sgfl-MluI

Cloning Scheme:



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:	NP_004110
RefSeq Size:	2979 bp
RefSeq ORF:	2982 bp
Locus ID:	2322
Cytogenetics:	13q12.2
Protein Families:	Druggable Genome, ES Cell Differentiation/IPS, Protein Kinase, Transmembrane
Protein Pathways:	Acute myeloid leukemia, Cytokine-cytokine receptor interaction, Hematopoietic cell lineage, Pathways in cancer
MW:	109.2 kDa
Gene Summary:	This gene encodes a class III receptor tyrosine kinase that regulates hematopoiesis. This receptor is activated by binding of the fms-related tyrosine kinase 3 ligand to the extracellular domain, which induces homodimer formation in the plasma membrane leading to autophosphorylation of the receptor. The activated receptor kinase subsequently phosphorylates and activates multiple cytoplasmic effector molecules in pathways involved in apoptosis, proliferation, and differentiation of hematopoietic cells in bone marrow. Mutations that result in the constitutive activation of this receptor result in acute myeloid leukemia and acute lymphoblastic leukemia. [provided by RefSeq, Jan 2015]