

Product datasheet for **SC124086**

FLT3 (NM_004119) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	FLT3 (NM_004119) Human Untagged Clone
Tag:	Tag Free
Symbol:	FLT3
Synonyms:	CD135; FLK-2; FLK2; STK1
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL4</u>
E. coli Selection:	Ampicillin (100 ug/mL)



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Fully Sequenced ORF:

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>OriGene ORF sequence for NM_004119 edited
ATGCCGGCGTTGGCGCGCGCGGCCAGCTGCCGCTGCTCGTTGTTTTCTGCAATG
ATATTTGGGACTATTACAAATCAAGATCTGCCTGTGATCAAGTGTGTTTTAATCAATCAT
AAGAACAATGATTCATCAGTGGGGAAGTCATCATATCCCATGGTATCAGAATCCCCG
GAAGACCTCGGGTGTGCGTTGAGACCCAGAGCTCAGGGACAGTACGAAGCTGCCGCT
GTGGAAGTGGATGATCTGCTCCATCACACTGCAAGTGTGGTCGATGCCCCAGGGAAC
ATTTCTGTCTCTGGGCTTTAAGCACAGCTCCCTGAATTGCCAGCCACATTTTGATTTA
CAAAACAGAGGAGTTGTTTCCATGGTCATTTTGAAAATGACAGAAACCCAAGCTGGAGAA
TACCTACTTTTTATTACAGAGTGAAGCTACCAATTACACAATATTGTTTACAGTGAGTATA
AGAAAATACCCTGCTTTACACATTAAGAAGACCTTACTTTAGAAAAATGAAAAACCAGGAC
GCCCTGGTCTGCATATCTGAGAGCGTTCAGAGCCGATCGTGGAATGGGTGCTTTGCGAT
TCACAGGGGAAAGCTGTAAAGAAGAAAGTCCAGCTGTTGTTAAAAAGGAGGAAAAAGT
CTTCATGAATTTTGGGATGGACATAAGGTGCTGTGCCAGAAATGAACTGGGCAGGGAA
TGCACCAGGCTGTTACAATAGATCTAAATCAAACCTCAGACCACATTGCCACAATTA
TTTCTTAAAGTAGGGAAACCCTTATGGATAAGGTGCAAAGCTGTTTCATGTGAACCATGGA
TTCCGGGCTCACCTGGGAATTAGAAAACAAGCACTCGAGGAGGGCAACTACTTTGAGATG
AGTACCTATTCAACAAACAGAACTATGATACGGATTCTGTTTGCTTTTGTATCATCAGTG
GCAAGAAACGACACCCGATACTACACTTGTTCCTTCAAAGCATCCCAGTCAATCAGCT
TTGGTTACCATCGTAGAAAAGGGATTTATAAATGCTACCAATTCAGTGAAGATTATGAA
ATTGACCAATATGAAGAGTTTTGTTTTTCTGTACAGTTTTAAAGCCTACCCACAAATCAGA
TGTACGTGGACCTTCTCTCGAAAATCATTTCTTGTGAGCAAAAGGGTCTTGATAACGGA
TACAGCATATCCAAGTTTTGCAATCATAAGCACCAGCCAGGAGAATATATATCCATGCA
GAAAATGATGATGCCAAATTTACCAAAATGTTACGCTGAATATAAGAAGGAAACCTCAA
GTGCTCGCAGAAGCATCGGCAAGTCAGGCGTCTGTTTTCTCGGATGGATACCCATTACCA
TCTTGACCTGGAAGAAGTGTTCAGACAAGTCTCCCAACTGCACAGAAGAGATCACAGAA
GGAGTCTGGAATAGAAAGGCTAACAGAAAAGTGTGGACAGTGGGTGTCGAGCAGTACT
CTAAACATGAGTGAAGCCATAAAAGGGTTCCTGGTCAAGTGTGTCATACAATTCCTT
GGCACATCTTGTGAGACGATCCTTTAACTCTCCAGGCCCTTCCCTTTCATCCAAGAC
AACATCTCATTCTATGCAACAATTGGTGTGTCTCTCTTTCATTGTCGTTTTAACCTG
CTAATTTGTGACAAAGTACAAAAAGCAATTTAGGTATGAAAGCCAGCTACAGATGGTACAG
GTGACCGGCTCCTCAGATAATGAGTACTTCTACGTTGATTTAGAGAATATGAATATGAT
CTCAAATGGGAGTTTCCAAGAGAAAATTTAGAGTTTGGGAAGGTAAGTACTAGGATCAGGTGCT
TTTGAAAAGTGAACGCAACAGCTTATGGAATTAGCAAAAACAGGAGTCTCAATCCAG
GTTGCCGTCAAAATGCTGAAAGAAAAGCAGACAGCTCTGAAAGAGAGGCACTCATGTCA
GAACTCAAGATGATGACCCAGCTGGGAAGCCAGAGAATATTGTGAACCTGCTGGGGCG
TGCACACTGTCAGGACCAATTTACTTGATTTTTGAATACTGTTGCTATGGTGATCTTCTC
AACTATCAAGAAGTAAAAGAGAAAAATTTACAGGACTTGGACAGAGATTTTCAAGGAA
CACAAATTCAGTTTTTACCCACTTTCCAATCACATCCAAATTCAGCATGCCTGGTTCA
AGAGAAGTTCAGATACACCCGACTCGGATCAAATCTCAGGGCTTCATGGGAATTCATTT
CACTCTGAAGATGAAATTGAATATGAAAACCAAAAAAGGCTGGAAGAAGAGGAGGACTTG
AATGTGCTTACATTTGAAGATCTTCTTTGCTTTGCATATCAAGTTGCCAAAGGAATGGAA
TTTCTGGAATTTAAGTCGTGTGTTACAGAGACCTGGCCGCCAGGAACGTGCTTGTCAAC
CACGGGAAAGTGGTGAAGATATGTGACTTTGGATTGGCTCGAGATATCATGAGTGATTCC
AACTATGTTGTCAGGGGCAATGCCCGTCTGCCTGTAAAATGGATGGCCCCGAAAGCCTG
TTTGAAGGCATCTACACCATTAAGAGTGTCTGGTCATATGGAATATTACTGTGGGAA
ATCTTCTCACTTGGTGTGAATCCTTACCCTGGCATTCCGGTTGATGCTAACTTCTACAAA
CTGATTCAAAATGGATTTAAAATGGATCAGCCATTTTATGCTACAGAAGAAATATACATT
ATAATGCAATCCTGCTGGGCTTTTGACTCAAGGAAACGGCCATCCTTCCCTAATTTGACT
TCGTTTTTAGGATGTCAGCTGGCAGATGCAAGAAGCGATGTATCAGAATGTGGATGGC
CGTGTTCGGAATGTCCTCACACCTACAAAACAGGCGACCTTTCAGCAGAGAGATGGAT
TTGGGGCTACTCTCCGCAGGCTCAGGTCGAAGATTCGTAG
    
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5' Read Nucleotide Sequence:

>OriGene 5' read for NM_004119 unedited
TATATACCCCGCCGTTGNCGCAATGGGCGGTAGGCGTGTACGGTGGGAGGTCTATATAA
GCAGAGCTCGTTTAGTGAACCGTCAGAATTTTGAATACGACTCACTATAGGGCGGCCGC
GAATTCGGCACCAGGCTGGGCGCGCGGCCCTGGGACCCCGGCTCCGGAGGCCATGCC
GGCGTTGGCGCGCGCGGCCAGCTGCCGCTGCTCGTTGTTTTTTCTGCAATGATATT
TGGGACTATTACAAATCAAGATCTGCCTGTGATCAAGTGTGTTTTAATCAATCATAAGAA
CAATGATTCATCAGTGGGAAGTCATCATATCCCATGGTATCAGAATCCCCGGAAGA
CCTCGGGTGTGCGTTGAGACCCAGAGCTCAGGGACAGTGTACGAAGCTGCCGCTGTGGA
AGTGGATGTATCTGCTTCCATCACACTGCAAGTCTGGTTCGATGCCCCAGGGAACATTTT
CTGTCTCTGGGTCTTAAAGCACAGCTCCCTGAATTGCCAGCCACATTTTGATTTACAAAA
CAGAGGAGTTGTTCCATGGTCATTTTGAAAAATGACAGAAACCAAGCTGGAGAATACCT
ACTTTTTATTAGAGTGAAGCTACCAATTACACAATATTGTTTACAGTGAAGTATAAGAAA
TACCCTGCTTTACACATTAAGAAGACCTTACTTTAGAAAAATGGGAAACAGGACGCCCT
GGTCTGCATATCTGAGAGCGTTCAGAGCCGATCGTGAATGGTGCCTTGCATTACACA
GGGGAAAAGCTGTAAGAAGAAAGTCCAGCTGTTGTTAAAAAGGAGGAAAAAGTCTTCA
TGAATATTTGGGGATGGACATAAGTGGCTGGGCAAAATTGACTGGGCAGGAAAGCACCAG
GCTGTTACCATAGATCTAATCAA

3' Read Nucleotide Sequence:

>OriGene 3' genomic read for NM_004119 unedited
CTGGATGGCACTCCAGGCCAGGAGAGGCACTGGGGAGGGGTACAGGGATGCCACCCGG
GATCTGTTGAGAAACAGCTATGACCGCGCCGCAATCTAGAGTCGAGTTTTTTTTTTTT
TTTTTTTTCCGTAGTAGAAATTTTATTCCACCATAAAAATATCACTAAATAGCTGAA
AAATTTACATATTATTTTAAAACATAGACTTAAAAAATCATATTAGCTTCTCCTTAGCAA
AATGCTTTTGTATGTATTTACAAGAATATACTGTACTTCAGGTACACAATCACTCA
AGCCAGCTGAGAAGGCCTTGGATGCAGATCAATGCTCCAATAAAGTTCATTATCAGCTC
CTCCTGCCTTGTGACAGGATGATTTGATTTTACAAAAGTCCCTTTGAAAACAAGAGTAA
CGCAGACAGCTTCTAGAGAAAAGTCTGGTGAAGCAGCAGTTGATAATAGATTTTCTTTTA
GTGATGAAATTAATCTTTGTTTTGGGTAATCTACAGNCCTGTTANGGATAAGGTTGAGA
AGGATAAGNNTCCTTAAAACCTAAATTGGGTTCCCTTTACGAAATCTTTGAACTGGAG
CCCTTGGGGAGGAGGAGTAAGCCCCAAATCCCATTCTTTCTGGCTTGAAAGGGGTC
CCCCGGGTTTTTGGGAAGGGTGGAGGCACTTTTCGGAACCAGGGCCTTCCCCTTTTCG
AATACTTGGGTTTCTTCTGCATTGGCCAGTTGACTTCTTAAAAACAATTTCAATTTGGGA
AGGAGGGCGGTTCTTGGTCAAAACCCAGCGGTGGG

Restriction Sites:

NotI-NotI

ACCN:

NM_004119

Insert Size:

4000 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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](#)

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).

Reconstitution Method:

1. Centrifuge at 5,000xg for 5min.
2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
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.

RefSeq: [NM_004119.1](#), [NP_004110.1](#)

RefSeq Size: 3848 bp

RefSeq ORF: 2982 bp

Locus ID: 2322

UniProt ID: [P36888](#)

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

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]

Transcript Variant: This variant (1) represents the shorter transcript and encodes the protein.