

Product datasheet for **RG211459**

FLT3 (NM_004119) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	FLT3 (NM_004119) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	FLT3
Synonyms:	CD135; FLK-2; FLK2; STK1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>RG211459 representing NM_004119
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGCCGGCGTTGGCGCGCGGCCGCGCCAGCTGCCGCTGCTCGTTGTTTTCTGCAATGATATTTGGGA
 CTATTACAAATCAAGATCTGCCTGTGATCAAGTGTGTTTTAATCAATCATAGAACAATGATTCATCAGT
 GGGGAAGTCATCATATCCCATGGTATCAGAATCCCCGGAAGACCTCGGGTGTGCGTTGAGACCCAG
 AGCTCAGGGACAGTGTACGAAGCTGCCGCTGTGGAAGTGGATGTATCTGCTTCCATCACACTGCAAGTGC
 TGGTTCGATGCCCCAGGGAACATTTCTGTCTCTGGGTCTTTAAGCACAGCTCCCTGAATTGCCAGCCACA
 TTTTGATTTACAAAACAGAGGAGTTGTTCCATGGTCATTTTGAAGTACAGAAAACCAAGCTGGAGAA
 TACCTACTTTTTATTAGAGTGAAGCTACCAATTACACAATTTGTTTACAGTGAATAAGAAATACCC
 TGCTTTACACATTAAGAAGACCTTACTTTAGAAAAATGGAAAACAGGACGCCCTGGTCTGCATATCTGA
 GAGCGTCCAGAGCCGATCGTGGATGGGTGCTTTGCGATTACAGGGGGAAAGCTGTAAGAAGAAAGT
 CCAGCTGTTGTTAAAAAGGAGGAAAAAGTCTTCAATGAATTTTGGGATGGACATAAGGTGCTGTGCCA
 GAAATGAACTGGGCAGGGAATGCACCAGGCTGTTCACAATAGATCTAAATCAAATCCTCAGACCACATT
 GCCACAATTTTTCTAAAGTAGGGGAACCCCTTATGGATAAGGTGCAAAGCTGTTTCATGTGAACCATGGA
 TTCGGGCTCACCTGGGAATTAGAAAACAAAGCACTCGAGGAGGGCAACTACTTTGAGATGAGTACCTATT
 CAACAAACAGAATATGATACGGATTCTGTTTGTCTTTGTATCATCAGTGGCAAGAAACGACACCCGGATA
 CTACACTTGTTCCTCTTCAAAGCATCCCAGTCAATCAGCTTTGGTTACCATCGTAGAAAAGGGATTATA
 AATGCTACCAATCAAGTGAAGATTATGAAATGACCAATATGAAGAGTTTTGTTTTCTGTCAGGTTTA
 AAGCCTACCCACAAATCAGATGTACGTGGACCTTCTCTCGAAAATCATTTCCTTTGAGCAAAAAGGCTCT
 TGATAACGGATACAGCATATCCAAGTTTTGCAATCATAAGCACCAGCCAGGAGAATATATATTCATGCA
 GAAAATGATGATGCCAATTTACAAAATGTTACGCTGAATATAAGAAGGAAACCTCAAGTGTCTCGCAG
 AAGCATCGGCAAGTCAGGCGTCTGTTTCTCGGATGGATACCCATTACCATCTTGACCTGGAAGAAGTG
 TTCAGACAAGTCTCCAACTGCACAGAAGAGATCACAGAAGGAGTCTGGAATAGAAAAGGCTAACAGAAAA
 GTGTTTGGACAGTGGGTGTGAGCAGTACTCTAAACATGAGTGAAGCCATAAAGGGTCTCTGGTCAAGT
 GCTGTGCATACAATCCCTTGGCACATCTGTGAGACGATCCTTTAACTCTCCAGGCCCTTCCCTTT
 CATCCAAGACAACATCTCATTCTATGCAACAATGGTGTGTGCTCTCTCATTGTGCTTTTAAACCTG
 CTAAATTTGTCACAAGTACAAAAGCAATTTAGGTATGAAAGCCAGCTACAGATGGTACAGGTGACCGGCT
 CCTCAGATAATGAGTACTTCTACGTTGATTTTACAGAGAATATGAATATGATCTCAAATGGGAGTTTCCAAG
 AGAAAATTTAGAGTTTGGGAAGGTACTAGGATCAGGTGCTTTTGGAAAAGTATGAACGCAACAGCTTAT
 GGAATTAGCAAAACAGGAGTCTCAATCCAGGTTGCCGTCAAAATGCTGAAAGAAAAGCAGACAGCTCTG
 AAAGAGAGGCACTCATGTGCAAGTCAAGATGATGACCCAGCTGGGAAGCCACGAGAATATTGTGAACCT
 GCTGGGGCGTGCACACTGTGAGGACCAATTTACTTGATTTTTGAATACTGTTGCTATGGTATCTTCTC
 AACTATCTAAGAAGTAAAAGAGAAAAATTTACAGGACTTGGACAGAGATTTTCAAGGAACACAATTTCA
 GTTTTTACCCACTTTCCAATCACATCCAAATTCAGCATGCCTGGTTCAAGAGAAGTTCAGATACACCC
 GGACTCGGATCAAATCTCAGGGCTTATGGGAATTCATTTCACTCTGAAGATGAAATGAATATGAAAAAC
 CAAAAAAGGCTGGAAGAAGAGGAGGACTTGAATGTGCTTACATTTGAAGATCTTCTTTGCTTTGCATATC
 AAGTTGCCAAAGGAATGGAATTTCTGGAATTTAAGTCGTGTGTTACAGAGACCTGGCCGCCAGGAACGT
 GCTTGTCAACCCAGGAAAGTGGTGAAGATATGTGACTTTGGATTGGCTCGAGATATCATGAGTATTCC
 AACTATGTTGTCAGGGCAATGCCCGTCTGCCTGTAATAATGGATGGCCCCGAAAGCCTGTTTGAAGGCA
 TCTACACCATTAAGAGTGTCTGCTCATATGGAATATTACTGTGGGAAATCTTCTCACTTGGTGTGAA
 TCCTTACCCTGGCATTCCGGTTGATGCTAACTTCTACAACTGATTCAAATGGATTTAAAATGGATCAG
 CCATTTTATGCTACAGAAGAAATATACATTATAATGCAATCCTGTGGGCTTTTACTCAAGGAAACGGC
 CATCCTTCCCTAATTTGACTTCGTTTTTAGGATGTCAGCTGGCAGATGCAGAAGAAGCGATGATCAGAA
 TGTGGATGGCCGTGTTTCGGAATGTCCTCACACCTACAAAACAGGCGACCTTTCAGCAGAGAGATGGAT
 TTGGGGCTACTCTCTCCGACGGCTCAGGTCGAAGATTCG

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence: >RG211459 representing NM_004119
 Red=Cloning site Green=Tags(s)

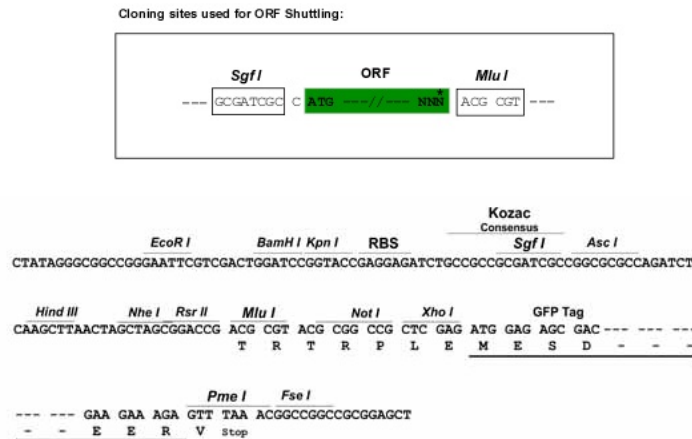
```

MPALARGGGQLPLLVVFSAIFGTITNQDLPVIKCVLINHKNNDSVVGKSSSYPMVSESPEDLGCALRPQ
SSGTVYEEAAVEVDVSASITLQVLVDAPGNISCLWVFKHSSLNCQPHFDLQNRGVVSMVILKMTETQAGE
YLLFIQSEATNYITLFTVSI RNTLLYLRRPYFRKMNQDALVCISESVPEPIVEWVLCDSQGESCKEES
PAVVKKEEKVLHELFGMDIRCCARNELGRECTRLFTIDLNQTPQTLPQLFLKVGPELWIRCKAVHVNHG
FGLTWEL ENKALEEGNYFEMSTYSTNR TMIRILFAFVSSVARNDTGYTCS SSKHPSQSALVTIVEKGF I
NATNSSEIDYEIDQYEEFCFSVRFKAYPQIRCTWTF SRKSFPC EQKGLDNGYSISKFCNHKHQPGEYIFHA
ENDDAQFTKMF TLNIRRPQVLAEASASQASCFSDGYPLPSWTWKKCS DKSPNCTEEITEGVWNRKANRK
VFGQWVSSTLNMSEAIKGLVKCCAYNSLGTSCETILLNSPGPFPIQDNISFYATIGVCLLFIVVLT L
LICHKYKKQFRYESQLQMVQVTGSSDNEYFYVDFREYEDLKWEPRENLEFGKVLGSGAFGKVMNATAY
GISKTGVS IQVAVKMLKEKADSSEREALMSELKMMTQLGSHENIVNLLGACTLSGPIYLI FEYCCYGDLL
NYLRSKREKFHRTWTEIFKEHNF SFYPTFQSHPNSSMPGSREVQIHPDSDQISGLHGNSFHSEDEIEYEN
QKRLEEEEDLNVLTFEDLLCFAYQVAKGMEFLEFKSCVHRDLAARNVLVTHGKVKICDFGLARDIMSDS
NYVVRGNARLPVKWMAPESLFEGIYTIKSDVWSYGILLWEIFSLGVNYPGIPVDANFYKLIQNGFKMDQ
PFYATEEIIYIMQSCWAFDSRKRPSFPLNTSFLGCQLADAEEMYQNVDGRVSECPHTYQNR RPF SREMD
LGLLSPQAQVEDS
  
```

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_004119

ORF Size: 2979 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](#)

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).

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: 3475 bp

RefSeq ORF: 2982 bp

Locus ID: 2322

UniProt ID: [P36888](#)

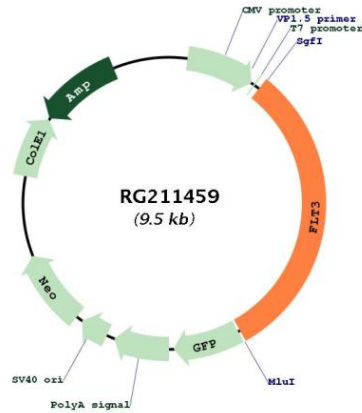
Cytogenetics: 13q12.2

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]

Product images:


Circular map for RG211459