

Product datasheet for **MG223373**

Flt3 (NM_010229) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Flt3 (NM_010229) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Flt3
Synonyms:	B230315G04; CD135; Flk-2; Flk2; Flt-3; Ly72; wmf1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>MG223373 representing NM_010229
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGCGGGCGTTGGCGCAGCGCAGCGACCGCGCGTCTGTCTGCTTGTGTTTTGTGTCAGTAATGATTCTTG
 AGACCGTTACAAACCAAGACCTGCCTGTGATCAAGTGTGTTTTAATCAGTCATGAGAACAATGGCTCATC
 AGCGGAAAGCCATCATCGTACCGAATGGTGCGAGGATCCCCAGAAGACCTCCAGTGTGCCCCGAGGCGC
 CAGAGTGAAGGGACGGTATATGAAGCGGCCACCGTGGAGGTGGCCGAGTCTGGGTCCATCACCTGCAAG
 TGCAGCTCGCCACCCAGGGGACCTTCTGCCTCTGGGTCTTTAAGCACAGCTCCCTGGGCTGCCAGCC
 GCACTTTGATTTACAAAACAGAGGAATCGTTTCCATGGCCATCTTGAACGTGACAGAGACCCAGGCAGGA
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 CACAGCTGTACGTGCTAAGAAGACCTTACTTTAGGAAGATGGAACCAGGACGCACTGCTCTGCATCTC
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 GTATCAGAACATGGGTGGCAACGTCCCAGAACATCCATCCATCTACCAAAACAGGCGGCCCTCAGCAGA
 GAGGCAGGCTCAGAGCCGCATGCCACAGGCCAGGTGAAGATTCACGGAGAAAGAAGT

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence: >MG223373 representing NM_010229
 Red=Cloning site Green=Tags(s)

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MRALAQRSDRLLLLLVLSVMILETVTNQDLPIKCVLISHENNGSSAGKPSSYRMVRGSPEDLQCAPRR
QSEGTVVEAATVEVAESGITLQVQLATPGDLSCLWVFKHSSLGCQPHFDLQNRGIVSMAILNVTETQAG
EYLLHIQSEAAANYTVLFTVNVTRDTQLYVLRPPYFRKMENQDALLCISEGVPEPTVEWVLCSSHRESCKEE
GPAVVRKEEKVLHELFGTDIRCCARNALGRECKLFTIDLNQAPQSTLPQLFLKVGPELWIRCKAIHVNH
GFGLTWELEDKALEEGSYFEMSTYSTNRMIRILLAFVSSVGRNDTGYYTCSSSHPSQSALVTILEKGF
INATSSQEYEIDPYEKFCFSVRFKAYPRIRCTWIFSQASFPCEQRGLEDGYSISKFCDHKNKPGEYIFY
AENDDAQFTKMF TLNIRKKPQVLANASASQASCSSDGYPLPSWTWKKCSKSPNCTEEIPEGVWNKKANR
KVFGQWVSSSTLN MSEAGKLLVKCCAYNSMGTSCEIFLNSPGPFPIQDNISFYATIGLCLPFIVVLI
VLI CHKYKKQFRYESQLQMIQVTGPLDNEYFYVDFRDYEYDLKWEFPRENLEFGKVLGSGAFGRVMNATA
YGISKTGVSIQVAVKMLKEKADSCEKEALMSELKMMTHLGHDNIVNLLGACTL SGPVYLIFEYCCYGDL
LNYLRSKREKFHRTWTEIFKEHNF SFYPTFQAHSNSSMPGSREVQLHPPLDQLSGFNGNLIHSEDEIEYE
NQKRLAEEDLNVLTFEDLLCFAYQVAKGMEFLFKSCVHRDLAARNVLVTHGKVVKICDFGLARDIL
SDSSYVVRGNARLPVKWMAPELFEIGIYTIKSDVWSYGILLWEIFSLGVPYPGIPVDANFYKLIQSGFK
MEQPFYATEGIYFVMQSCWAFDSRKRPSFNLTSFLGCQLAEAEAMYQNMGGNVPEHPSIYQNRRLPSR
EAGSEPPSPAQVKIHGERS
    
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TRTRPLE - GFP Tag - V

Restriction Sites:

Sgfl-MluI

Cloning Scheme:



ACCN: NM_010229

ORF Size: 3000 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_010229.2](#), [NP_034359.2](#)

RefSeq Size: 3664 bp

RefSeq ORF: 3003 bp

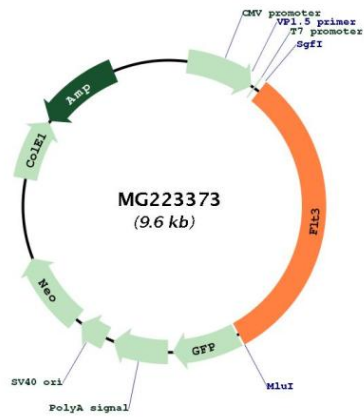
Locus ID: 14255

UniProt ID: [Q00342](#)

Cytogenetics: 5 G3

Gene Summary: Tyrosine-protein kinase that acts as cell-surface receptor for the cytokine FLT3LG and regulates differentiation, proliferation and survival of hematopoietic progenitor cells and of dendritic cells. Promotes phosphorylation of SHC1 and AKT1, and activation of the downstream effector MTOR. Promotes activation of RAS signaling and phosphorylation of downstream kinases, including MAPK1/ERK2 and/or MAPK3/ERK1. Promotes phosphorylation of FES, FER, PTPN6/SHP, PTPN11/SHP-2, PLCG1, and STAT5A and/or STAT5B. Activation of wild-type FLT3 causes only marginal activation of STAT5A or STAT5B. Mutations that cause constitutive kinase activity promote cell proliferation and resistance to apoptosis via the activation of multiple signaling pathways.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MG223373