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Product datasheet for MG225313

Flt4 (NM_008029) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Flt4 (NM_008029) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Flt4
Synonyms:	AI323512; Chy; Flt-4; VEGFR-3; VEGFR3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

ORF Nucleotide Sequence:

>MG225313 representing NM_008029
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGCAGCCGGGCGCTGCGCTGAACCTGCGCCTGTGGCTCTGCCTCGGACTCCTCCAAGGCCTGGCAAATG
GTTACTCCATGACCCCTCCAACCCTGAACATCACAGAGGATTCATATGTGATTGACACCGGGGACAGCCT
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GACGTTTGCCCAGCGCAGCCTCCGGAGGCGGCAGCAGCGGGATGGCATGCCACAGTGCCGAGACTGGAAG

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GAGGTGACCACTCAGGATGCTGTGAACCCCATCGAGAGTCTGGACAGCTGGACGGAGTTTGTGGAGGGGA
AGAATAAGACGGTGAGCAAGCTGGTGATCCAGGATGCCAATGTGTCAGCCATGTACAAGTGTGTGGTCGT
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GCTCCACCTTCTTCGCAGACAGCAGCTAC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>MG225313 representing NM_008029
Red=Cloning site Green=Tags(s)

MQPGAALNLRLWLCLGLLQGLANGYSMTPPTLNITEDSYVIDTGDSLSISCRGQHPLEWTWPGAQEVLTT
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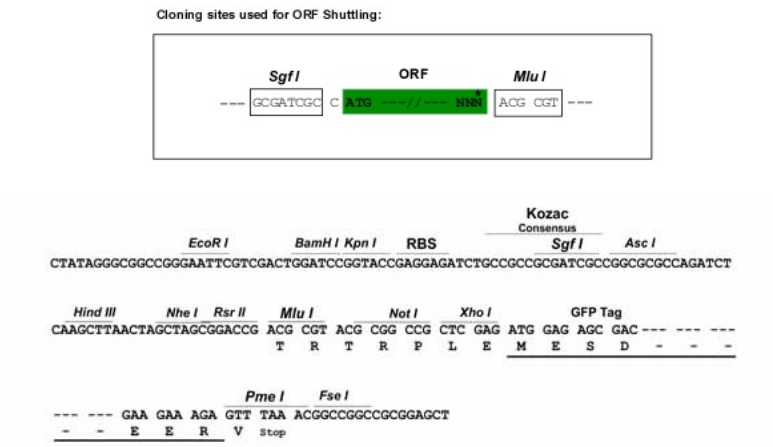
VFYNNEYGEVSQPCTEGDCCPSAGSTFFADSSY

TRTRPLE - GFP Tag - V

Chromatograms: https://cdn.origene.com/chromatograms/ja1839_e08.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



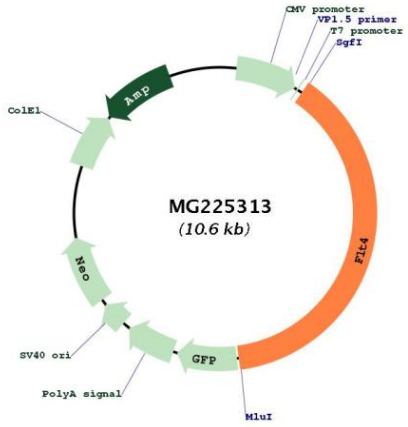
ACCN: NM_008029

ORF Size: 4089 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_008029.3, NP_032055.1
RefSeq Size:	5853 bp
RefSeq ORF:	4092 bp
Locus ID:	14257
UniProt ID:	P35917
Cytogenetics:	11 29.69 cM

Gene Summary: Tyrosine-protein kinase that acts as a cell-surface receptor for VEGFC and VEGFD, and plays an essential role in adult lymphangiogenesis and in the development of the vascular network and the cardiovascular system during embryonic development. Promotes proliferation, survival and migration of endothelial cells, and regulates angiogenic sprouting. Signaling by activated FLT4 leads to enhanced production of VEGFC, and to a lesser degree VEGFA, thereby creating a positive feedback loop that enhances FLT4 signaling. Modulates KDR signaling by forming heterodimers. Mediates activation of the MAPK1/ERK2, MAPK3/ERK1 signaling pathway, of MAPK8 and the JUN signaling pathway, and of the AKT1 signaling pathway. Phosphorylates SHC1. Mediates phosphorylation of PIK3R1, the regulatory subunit of phosphatidylinositol 3-kinase. Promotes phosphorylation of MAPK8 at 'Thr-183' and 'Tyr-185', and of AKT1 at 'Ser-473'.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MG225313