

## Product datasheet for **MC224341**

### Flt4 (NM\_008029) Mouse Untagged Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** Flt4 (NM\_008029) Mouse Untagged Clone  
**Tag:** Tag Free  
**Symbol:** Flt4  
**Synonyms:** AI323512; Chy; Flt-4; VEGFR-3; VEGFR3  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**Cell Selection:** Neomycin  
**Fully Sequenced ORF:** >MC224341 representing NM\_008029  
Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**GCGATCGCC**

ATGCAGCCGGGCGCTGCGCTGAACCTGCGCCTGTGGCTCTGCCTCGGACTCCTCCAAGGCCTGGCAAATG  
GTTACTCCATGACCCCTCAACCCTGAACATCACAGAGGATTCATATGTGATTGACACCGGGGACAGCCT  
ATCCATATCCTGCAGGGGACAGCACCCCTCGAGTGGACCTGGCCAGGGGCCAGGAGGTACTGACCACA  
GGTGGGAAGGACAGTGAAGACACACGGGTTGTGCATGACTGTGAAGGCACAGAAGCTAGGCCCTACTGCA  
AGGTGCTACTGCTGGCCAGACTCACGCCAACACACGGGCGAGCTACCACTGCTACTACAAGTACATCAA  
GGCCCGGATTGAGGGCACCACAGCTGCCAGCACCTATGTGTTTGAAGAGACTTTAAACACCCCTTTCATC  
AACAACTGACACGCTCCTGGTCAACAGGAAGGACTCGATGTGGGTGCCCTGCTTGGTGTCCATCCCCG  
GCCTCAACATCACACTGCGCTCGCAAAGCTCAGCGCTGCACCCCGACGGGCGAGGAGGTGCTGTGGGATGA  
CCGCCGGGATGCGGGTGGCCACTCACTGTTGCGCGATGCCCTGTACCTGCAGTGCAGAGACCCTGG  
GGTGACCAGAATTCCTTCCAATCTCTCGTCGTGCACATCACAGGCAATGAGCTGTACAGTGTGGGCTGA  
TGTACCCCAAGAAGTCAATGGAGCTGTTGGTGGAGAGAAGCTGGTTTTGAAGTGTACAGTGTGGGCTGA  
GTTGACTCAGGTGTACCTTCGACTGGGATTATCCAGGAAGCAGGCAGAGCGGGCTAAGTGGGTACCT  
GAGCGGGTTCACAGCAGACCCACAGAACTCTCCAGCATCCTGACCATCCACAATGTCAGCCAGAATG  
ACCTGGGCCCTATGTGTGTGAGGCCAACAAATGGGATTACAGCGGTTCCGGGAAAGCACAGAGGTCATTGT  
GCACGAAAAGCCCTTCATCAGTGTGAGTGGCTCAAAGGACCTGTCTGGAGGCCACAGCCGGTGCAGAG  
CTGGTGAAGCTACCCGTGAAGCTGGCAGCTTATCCCCACCGAGTTCCAATGGTACAAGGACAGAAAGG  
CAGTGACTGGGCGCCACAATCCCCATGCTCTGGTCTCAAAGAGGTGACCGAGGCCAGCGCAGGGGTCTA  
CACTCTCGCCCTGTGAACTCTGCAGCTGGTCTGAGGCAAACATCAGTCTGGAGCTGGTGGTGAATGTG  
CCTCCTCATACACGAAAAGGAAGCCTCTTACCAGCATCTACTCCCGCCACAGTCCGAGACCCCTCA  
CCTGCACCGCCTATGGAGTACCCCAACCCCTCAGTGTCCAGTGGCACTGGAGGCCCTGGACACCCCTGCAA  
GACGTTTGGCCAGCGCAGCCTCCGGAGGCGGCAGCAGCGGGATGGCATGCCACAGTGCAGAGACTGGAAG  
GAGGTGACCACTCAGGATGCTGTGAACCCATCGAGAGTCTGGACAGCTGGACGGAGTTTGTGGAGGGGA



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AGAATAAGACGGTGAGCAAGCTGGTGATCCAGGATGCCAATGTGTCAGCCATGTACAAGTGTGGTTCGT  
 CAACAAAGTGGGCCAGGATGAGAGACTCATCTACTTCTATGTGACCACCATCCCAGGCGGTTTCAGTATC  
 GAGTCCGAGCCTTCTGAGGATCCCTTAGAAGGCCAGTCCGTGCGCCTCAGCTGCCGGGCGGACAACACTACA  
 CGTACGAACATCTGCGCTGGTACCGGCTCAACCTCTCCACACTGCACGATGCTCAAGGGAACCCCTATT  
 GCTGGACTGCAAAAACGTGCACCTGTTTCCACGCCCCAGAGGCCAACCTAGAGGAGGCAGAGCCCGGG  
 GCCCGCCACGCCACCCTCAGTTTGAATATCCCCCGAGTGGCGCCGAGGACGAGGGTGACTACGTGTGTG  
 AAGTGCAGGATAGGCGCAGCCAGGACAAGCACTGCCACAAGAAGTACCTGTCCGTGCAGGCCCTGGAAGC  
 TCCTCGGCTCACGCAGAACTTGACCGACCTCCTGGTGAACGTGAGTGACTCCCTGGAGATGCGATGCCCG  
 GTGGCTGGAGCGCATGTGCCAGTATTGTGTGGTACAAAGATGAAAGGCTCCTGGAGAAAGAGTCGGGAA  
 TCGACCTGGCAGACTCCAATCAGAGGCTGAGCATCCAGCGCGTGCAGGAGGACGAGGTCGTTATCT  
 GTGCAGCGTGTGCAATGCCAAGGGCTGCGTAAACTCCTCTGCCAGCGTGGCAGTGAAGGCTCTGAAGAT  
 AAAGGCAGCATGGAGATTGTGATACTCATTGGCACTGGCGTCATCGCAGTTTTCTCTGGGTCTCCTCC  
 TGCTCATCTTCTGTAACATGAAAAGGCTGCCATGCAGACATCAAGACGGGCTACCTGTCCATCATCAT  
 GGACCCCGGGGAGGTGCCTTTGGAGGAGCAGTGTGAATACCTGTCTATGACGCCAGCCAGTGGGAGTTC  
 CCCAGGAAAGGTTGCACCTCGGAGAGTCTAGGCCACGGGGCTTTTGGGAAGGTGGTGAAGCCTCAG  
 CTTTTGGCATCAATAAAGGCAGCAGCTGTGACACCGTGGCTGTGAAGATGCTGAAAGAGGGCGCTACTGC  
 CAGCGAGCACCGTGCCCTGATGTGCGGAGCTCAAGATCCTAATTCACATCGGCAACCATCTCAACGTGGTC  
 AACCTCCTAGGGGCGTGACCAAGCCCAACGGCCCTCTCATGGTATCGTGGAGTTTTGCAATACGGCA  
 ACCTCTCCAACCTCTTGGCGTGTCAAGCGGGACAGTTCACCCCTACGCGGAGAAGTCTCCGGAGCAACG  
 CAGGCGCTTCCGCGCCATGGTAGAAGGCCCAAAGCTGATAGGAGGAGACCTGGAAGCAGCGACAGGGCC  
 CTGTTACGCGGTTCTGATGGGCAAAGGAAGTGCACGGCGAGCCCCACTGTCCAAGAAGCTGAGGACC  
 TATGGCTGAGCCCACTGACCATGGAAGACCTTGTATGCTACAGCTTCCAAGTTGCCCGGGGAATGGAGTT  
 CCTGGCTTCCCGCAAGTGCATTCACAGAGACCTGGTGTCTCGAACATCCTACTGTCAGAAAGTGACATA  
 GTGAAGATCTGCGACTTTGGCCTCGCTCGGGACATCTACAAAGACCCCGACTATGTCCGAAAGGGCAGTG  
 CCCGACTTCTCTGAAATGGATGGCCCCGAGAGCATCTTTGATAAGGTGTACACCACGCAGAGTGTGT  
 GTGGTCTTCCGCGTGTGCTGTGGGAGATCTTCTCATTGGGGGCTCTCCATACCCTGGGGTACAGATC  
 AATGAGGAGTTCTGCCAGCGGCTGAAGGATGGCACTCGAATGAGAGCCCCGGAAGTGGCCACTCCTGCCA  
 TACGCCACATCATGCAGAGTTGCTGGTCTGGAGACCCTAAAGCAAGACCTGCTTTCTGACCTAGTGGAA  
 GATCCTGGGGACCTGCTTCCAGGGCGGAGGCTGGCAGGAGGGAAGAGGAGCGCATGGCCCTGCACAGC  
 TCTCAGAGCTCCGAGGAGGATGGCTTCATGCAGGCATCCACCACAGCTTACATATCACCGAAGCAGACG  
 CTGATGATAGTCCACCCAGCATGCATTGCCACAGCCTGGCAGCCAGATATTACAAGTGTGTGCTTTC  
 TGGGCGCCTGGCCAGAGGCACTAAGACTCCAGGCTCTTCCAGGATGAAGACATTTGAAGAATTGCCCATG  
 ACCCTACAACCTACAAAGCCTCCATGGATAACCAGACAGACAGCGGGATGGTGTGTCCTCAGAAGAGT  
 TTGAGGAGCTAGAAAGCAGGCATAGACCAGAAGGCAGCTTCAGCTGTAAAGGTCCTGGCCAGCACATGGA  
 TATTTCCAGAGGACACCCTGACCCCGGGGAGGGCGGACGGCCCACTCAAGGGGCACAAGGAGGCAAG  
 GTGTTTTATAACAACGAGTATGGGGAGGTCTCCAGCCATGTACAGAAGGTGACTGCTGCCCGTCTGCTG  
 GCTCCACCTTCTTCGAGACAGCAGCTACTAA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Restriction Sites:** SgfI-MluI  
**ACCN:** NM\_008029  
**Insert Size:** 4092 bp

<b>OTI Disclaimer:</b>	<p>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 <a href="mailto:custsupport@origene.com">custsupport@origene.com</a> or by calling 301.340.3188 option 3 for pricing and delivery.</p> <p>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. <a href="#">More info</a></p>
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"> <li>1. Centrifuge at 5,000xg for 5min.</li> <li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li> <li>3. Close the tube and incubate for 10 minutes at room temperature.</li> <li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li> <li>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.</li> </ol>
<b>RefSeq:</b>	<a href="#">NM_008029.3</a> , <a href="#">NP_032055.1</a>
<b>RefSeq Size:</b>	5853 bp
<b>RefSeq ORF:</b>	4092 bp
<b>Locus ID:</b>	14257
<b>UniProt ID:</b>	<a href="#">P35917</a>
<b>Cytogenetics:</b>	11 29.69 cM
<b>Gene Summary:</b>	<p>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]</p>