

## Product datasheet for **RR208624**

### Fer (NM\_001106928) Rat Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Fer (NM_001106928) Rat Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Fer
Synonyms:	Fert2; Flk; Flk_retired
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



[View online »](#)

**ORF Nucleotide Sequence:**

>RR208624 representing NM\_001106928  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGCATCGCC**

ATGGAGCAGAGTGTGGAGTGTCCCCTGTGAGGGTGACCTGGAGCCTGACTCTGACTCCAAGTTCTGTA  
 AAAAATGCTCTATACCGATGAGCCCTGGCCCTTCTCATCAGAGATCCAGAGATACCAGGAAAGAAAGGA  
 GAGGCTATCCAAATTTGAGTCTATTCGTCATTCAATTGCTGGAATAATTAAGTCTCCAAAGTCGGTCCTC  
 GGCTCTTCAACGCTCTCTGACGTGATCTCTGTGGGTGAGAAGCCCTGGCGGAGCATGACTGGTACCACG  
 GTGCCATCCCAGGATAGAGGCACAAGAACTGCTGAAGCAGCAGGGAGACTTCTGGTGCAGAGAGCCA  
 TGGGAAACCTGGTGAATATGTCCTTTCTGTATATTCTGACGGACAAGGAGGCACCTTATCATAACAGTTT  
 GTTGATAATCTATATCGATTTGAGGGCACCGGCTTTTCAAATATCCCTCAACTTATAGATCACCCTTCA  
 ATACAAAGCAAGTCATCACCAAGAAGTCGGGGTGGTTCTGCTGAATCCTATTCCAAAGGATAAGAAATG  
 GTTTCTCAATCATGAAGATGTTTCATTGGGAGAATTACTGGCAAGGGGAATTTTGGTGAGGTGTACAAG  
 GGCACACTGAAGGATAAAACCCCTGTTGCTGTTAAAACGTGCAAGGAAGACCTGCCTCAGGAACTAAAA  
 TAAAGTTTTTACAGGAAGCCAAAATTCTCAAGCAATATGATCACCCCAATATTGTCAAACCTATAGGCGT  
 GTGCACACAAAGACAGCCTGTCTACATCATTATGGAAGTGGTCCCAGGAGGTGATTTTCTGTCTTTCTG  
 AGGAAGAGGAAGGACGAGCTAAAGTTGAAGCAGTTGGTGAAGTTTTCTTGGACGTTGCTGCTGGCATGC  
 TGTATCTCGAGGGCAAGATCTGCATTACAGGGACCTGGCTGCACGGAAGTGCCTGGTAGGTGAAAATAA  
 TACTCTGAAAATCAGTGACTTTGGGATGCTCGGCAAGAAGACCGTGGAGTGATTCATCTTCTGGCTTA  
 AAGCAGATTCCCATTAAGTGGACAGCACCAGAAGCACTGAATTATGGGAGATACAGCTCTGAAAGTGACC  
 TGTGGAGCTTCGGCATCCTGCTCTGGGAGACTTTCAGCCTGGGAGTCTGTCCGTACCTGGGATGACAAA  
 CCAGCAAGCACGGGAACAAGTGGAGAGAGGGTATCGGATGTCAGCCCCACAGAAGTGTCCCAGGAAATT  
 TTTACAATCATGATGAAGTGTGGGATTACAAGCCTGAAAACCGCCCTAAGTTCAGTGACCTTCACAAAG  
 AGCTCACGGCCATCAAGAAGAAAATCACA

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>RR208624 representing NM\_001106928  
 Red=Cloning site Green=Tags(s)

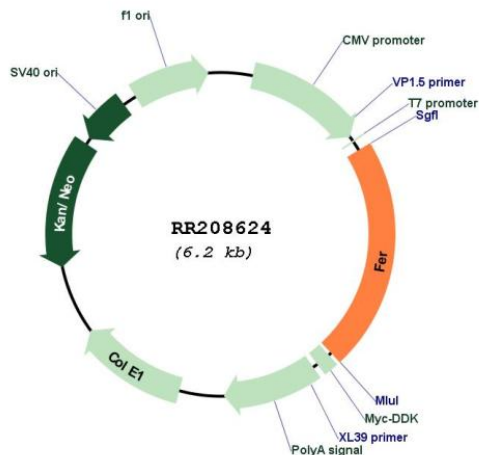
MEQSVVECPHCEGDLEPDSKFKKCSIPMSPGSSSEIQRYQERKERLSKFESIRHSIAGIIKSPKSVL  
 GSSTLSDVISVGEKPLAEHDWYHGAIPRIEAQELLKQQGDFLVRESHGKPGYVLSVYSDGQRRHFIIQF  
 VDNLYRFEGTGFSNIPQLIDHFNKQVITKKSQVLLNPIPDKKWLNHEDVSLGELLGKGNFGEVYK  
 GTLKDKTPVAVKTCKEDLPQELKIKFLQEAKILKQYDHPNIVKLIGVCTQRQPVYIIMELVPGDFLSFL  
 RKRKDELKQVRFSLDVAAGMLYLEGKICIHRLAARNCLVGENNTLKIISDFGMSRQEDGGVYSSSGL  
 KQIPIKWTAPEALNYGRYSSESVDVWFSFILLWETFSLGVCPYPMGTNQQAREQVERGYRMSAPQNCPEEI  
 FTIMMKWDYKPENRPKFSDLHKELTAIKKKIT

**TR**TRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:**

Sgfl-MluI

**Cloning Scheme:**

**Plasmid Map:**


**ACCN:** NM\_001106928

**ORF Size:** 1359 bp

**OTI Disclaimer:** 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\\_001106928.1](#), [NP\\_001100398.1](#)

**RefSeq Size:** 3387 bp

**RefSeq ORF:** 1362 bp

**Locus ID:** 301737

**Cytogenetics:** 9q37

**MW:** 51.5 kDa

**Gene Summary:** Tyrosine-protein kinase that acts downstream of cell surface receptors for growth factors and plays a role in the regulation of the actin cytoskeleton, microtubule assembly, lamellipodia formation, cell adhesion, cell migration and chemotaxis. Acts downstream of EGFR, KIT, PDGFRA and PDGFRB. Acts downstream of EGFR to promote activation of NF-kappa-B and cell proliferation. May play a role in the regulation of the mitotic cell cycle. Plays a role in the insulin receptor signaling pathway and in activation of phosphatidylinositol 3-kinase. Acts downstream of the activated FCER1 receptor and plays a role in FCER1 (high affinity immunoglobulin epsilon receptor)-mediated signaling in mast cells. Plays a role in the regulation of mast cell degranulation. Plays a role in leukocyte recruitment and diapedesis in response to bacterial lipopolysaccharide (LPS). Plays a role in neuronal cell death after brain damage. Phosphorylates CTTN, CTNND1, PTK2/FAK1, GAB1, PECAM1 and PTPN11. May phosphorylate JUP and PTPN1. Can phosphorylate STAT3, but the biological relevance of this clearly depends on cell type and stimulus (By similarity). Plays a role in synapse organization, trafficking of synaptic vesicles, the generation of excitatory postsynaptic currents and neuron-neuron synaptic transmission.[UniProtKB/Swiss-Prot Function]