

Product datasheet for **RR213898**

Fam89b (NM_001015013) Rat Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Fam89b (NM_001015013) Rat Tagged ORF Clone
Tag: Myc-DDK
Symbol: Fam89b
Synonyms: Mtvr2
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
Cell Selection: Neomycin
ORF Nucleotide Sequence: >RR213898 representing NM_001015013
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**GCGATCGCC**

ATGAACGGGCTGCCCTCAACTGAGGCGCCCGGTGGCGGGCTGCGCTCTGGCTGGGCTCCCGCCGCTAC
CGCGCGGCTCAGCGGCTTCTTAACGCTAGTGGTGGCTCGTGGAGGAGCTAGAGCGTGTCTACAGCCA
ACGGAGCCGCATCCACGACGAGCTGAGTCGTGCCGCCCGCCCGGATGGTCTCGCCAGCCCGGGC
TCTGCCAATTTAGGCTCTGCAGCGGGCCCGCGCCCGGTTAACCTCGACTCTGCACTGGCCGCGCTGC
GCAAGGAAATGGTGGTCTGCGACAGCTGGATATGTCCTGTGTGCCAGCTGTGGGCTGTATGAGTC
GATCCAGGACTACAAGCATCTGTGCCAAGACCTGAGCTTGTGCCAGGACCTGTCATCCTCTGCACTCC
GACAGCTCCTACCCACCCGATGCCGGCTGTCTGATGACGATGAGCCTCCTGATGCCAGCCTGCCCCAG
ACCCTCCACCCCTCACCGTGCCCGAGACTACAATGCCCGTGACCAAGTGGTTGCAGGATGCCTTCCAAT
CAGCCTT

ACGCGTACGCGGCGGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RR213898 representing NM_001015013
Red=Cloning site Green=Tags(s)

MNGLPSTEAPGGAGCALAGLPPLPRGLSGLLNASGGSWRELERVYSQRSRIHDEL SRAARAPDGPRHAAG
SANLGSAAAGPRRPVNLDSALAALRKEMVGLRQLDMSLLCQLWGLYESIQDYKHL CQDL SL CQDL SSSLHS
DSSYPDAGLSDDEPPDASLPDPPLTVPQTHNARDQWLQDAFQISL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

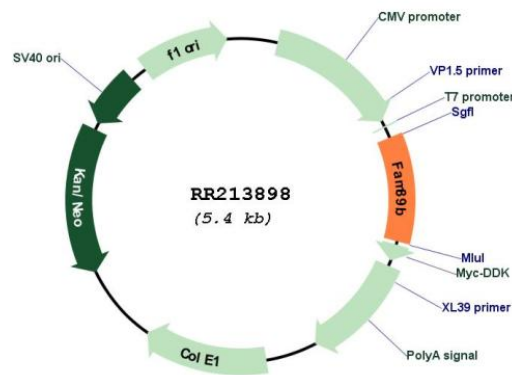
Restriction Sites: SgfI-MluI



Cloning Scheme:



Plasmid Map:



ACCN: NM_001015013

ORF Size: 567 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_001015013.1](#), [NP_001015013.1](#)

RefSeq Size: 1215 bp

RefSeq ORF: 570 bp

Locus ID: 309170

UniProt ID: [Q566R4](#)

Cytogenetics: 1q43

MW: 20.2 kDa

Gene Summary: Negatively regulates TGF-beta-induced signaling; in cooperation with SKI prevents the translocation of SMAD2 from the nucleus to the cytoplasm in response to TGF-beta. Acts as an adapter that mediates the specific recognition of LIMK1 by CDC42BPA and CDC42BPB in the lamellipodia. LRAP25-mediated CDC42BPA/CDC42BPB targeting to LIMK1 and the lamellipodium results in LIMK1 activation and the subsequent phosphorylation of CFL1 which is important for lamellipodial F-actin regulation.[UniProtKB/Swiss-Prot Function]