

## Product datasheet for MR224367

### Tm4sf20 (NM\_025453) Mouse Tagged ORF Clone

#### Product data:

Product Type: Expression Plasmids  
 Product Name: Tm4sf20 (NM\_025453) Mouse Tagged ORF Clone  
 Tag: Myc-DDK  
 Symbol: Tm4sf20  
 Synonyms: 1810018L02Rik  
 Mammalian Cell Selection: Neomycin  
 Vector: pCMV6-Entry (PS100001)  
 E. coli Selection: Kanamycin (25 ug/mL)  
 ORF Nucleotide Sequence: >MR224367 representing NM\_025453  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGATCGCC**

ATGACGTGCTGTGAAGGGTGGACATCCTGCAATGGCTTCAGCCTGCTCATTCTGATCCTGCTAGGAGTGG  
 TTATCAATTGTATACCCCTGGGAATCAGCTTAGTGGAGGCAGACTCGACTTCTCAAACCCCATCTCCTG  
 CTATGAGTGGTGGTTCCAGGAATTATAGGAGCAGGTCTGATGGCCATCCAGCAACAACAATGTCCTTG  
 GCAGCAAGAAAAAGAGCGTGTGCAACAATAAGACTGGGATGTTCTTTTCATCACTCTTCAGTGTGATCA  
 CAGTTGTTGGTGTGTATTGCATGTTGGTATCACTCCAGGCTCTCTTGAAGGACCTTAATTTGTAA  
 TACTCAGGCCAACAGTACTGTCACCTTGTGAATTTTCATTGAAAACTTAAGTAAATTTGATCCTGAATCC  
 TTCAATCTGCTGTGGTTCTCAATGGCACTTGTGTTTCTCCTACTGATTTAAAAACCCACCATCAATA  
 ACATGGTCAGTAACTGGAAAATACCAACTCCAACCTCTGAAGAAGACAGACAGGATTTTCCACTTCTC  
 AGTATTTATGAGTCTCCTGCTTGTGGAATCCTGGAGCTCCTGTTGGGCTCAGTCAGATACTCATTGGT  
 TTCCTTGGCTGTCTGTGTGGCTCTCTCAGCGACGGAGTCAAATTGTA

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA



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**Protein Sequence:** >MR224367 representing NM\_025453  
Red=Cloning site Green=Tags(s)

MTCCEGWTSCNGFSLILILLGVVINCIPGLISLVEADSTSQNPISCYEWVFPGIAGLMAIPATTMSL  
 AARKRACCNKTMGMFLSSLFSVITVVGAVYCMVLVSLQALLEGPLICNTQANSTVTCFSLKNLSKFDPE  
 FNLLWFFNGTCVSPDFKNPTINNMVSNWKIPNSNSEEDRHRIFHFVFMSSLLLVGILELLFGLSQILIG  
 FLGCLCGVSQRRSQIV

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mm9024\\_h04.zip](https://cdn.origene.com/chromatograms/mm9024_h04.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



\* The last codon before the Stop codon of the ORF

**ACCN:** NM\_025453

**ORF Size:** 678 bp

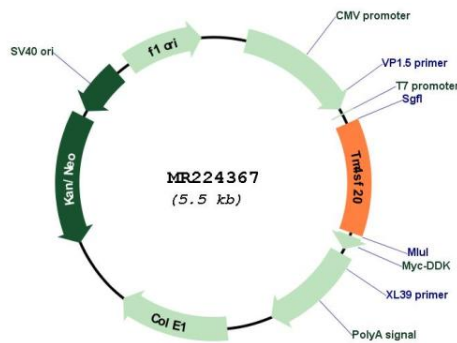
**OTI Disclaimer:** Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of 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](mailto: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.

<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>	<u><a href="#">NM_025453.4</a></u>
<b>RefSeq Size:</b>	1503 bp
<b>RefSeq ORF:</b>	681 bp
<b>Locus ID:</b>	66261
<b>UniProt ID:</b>	<u><a href="#">Q9CQY8</a></u>
<b>Cytogenetics:</b>	1 C5
<b>MW:</b>	25.2 kDa
<b>Gene Summary:</b>	<p>Polytopic transmembrane protein. Inhibits regulated intramembrane proteolysis (RIP) of CREB3L1, inhibiting its activation and the induction of collagen synthesis. In response to ceramide, which alters TM4SF20 membrane topology, stimulates RIP activation of CREB3L1. Ceramide reverses the direction through which transmembrane helices are translocated into the endoplasmic reticulum membrane during translation of TM4SF20, this mechanism is called 'regulated alternative translocation' (RAT) and regulates the function of the transmembrane protein.[UniProtKB/Swiss-Prot Function]</p>

**Product images:**



Circular map for MR224367