

Product datasheet for RC216351

TMEM41B (NM_015012) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	TMEM41B (NM_015012) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	TMEM41B
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC216351 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCGAAAGGCAGAGTCGCCGAACGATCGCAGTTGGGCGCTCACCACACGACCCCGTGGGGGACGGGG
CAGCGGGGACGCGGGGTCTCGCGCGCCTGGCAGCAGAGACCACCAGAAGGAAAAATCCTGGGTAGAAGC
TGGATCAGCAAGAATGTCACCTTATATTGGTGTCCATTTTCTATCTGCAGCTTTTGTATGTTTTTG
GTATATAAAAAATTTCTCAGCTTAGTGAAGAAGAAAGAGTGAATATGAAGTTCCAGAGATATGGATG
ATGCCAAGGCTCTAGGAAAAGTTTTATCCAAATACAAGGACACCTTTTATGTTCAAGTACTGTAGCTTA
TTTTGCTACATATATTTCTTGCAAACATTTGCTATTCCAGGCTCTATATTTCTCAGTATACTCTCAGGG
TTTCTTTATCCCTTTCCACTAGCCTTATTTCTGTTTGTGTTCTGGACTTGGTGCCTTTTCTGTT
ATATGCTTTCCTATTTAGTTGGGAGACCAGTTGTATACAAATACCTAACAGAGAAAGCAGTAAAATGGTC
ACAGCAGGTTGAACGTATAGAGAACATCTCATTAACTACATTATTTTTGAGAATAACACCATTTCTG
CCTAATTGGTTTATTAATATCACATCTCCTGTGATAAACGTGCCATTGAAAGTTTTTTTTATTGGTACTT
TTCTAGGTGTGCACCTCCTTTTGTAGCCATTAAGGCAGGAACAACACTGTATCAACTACAACAGC
AGGAGAAGCTGTTTCTGGAACCAATATTTATCTGATGATCTGGCTGTTCTTTCTATTCTGCCAGCC
ATCTTCAAAAAAACTAAAGCAGAAATTTGAG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



[View online »](#)

Protein Sequence: >RC216351 protein sequence
Red=Cloning site Green=Tags(s)

MAKGRVAERSQLGAHHTTPVGDGAAGTRGLAAPGSRDHQKEKSWVEAGSARMSLLILVSIFLSAAFVMFL
 VYKNFPQLSEEVRNMKVPRDMDDAKALGKVL SKYKDTFYVQVL VAYFATYIFLQTFaipgsiflsilsg
 FLYPFPALFLVCLCSGLGASFCYMLSYLVGRPVVYKYLTEKAVKWSQQVERHREHLINYIIFLRITPFL
 PNWFINITSPVINVPLKVFFIGTFLGVAPPSFVAIKAGTTLYQLTTAGEAVSWNSIFILMILAVLSILPA
 IFQKCLKQKFE

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6456_f07.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_015012

ORF Size: 873 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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_015012.4](#)

RefSeq Size: 3973 bp

RefSeq ORF: 876 bp

Locus ID: 440026

UniProt ID: [Q5BJD5](#)

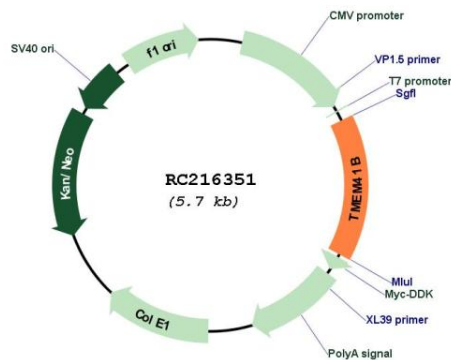
Cytogenetics: 11p15.4

Protein Families: Transmembrane

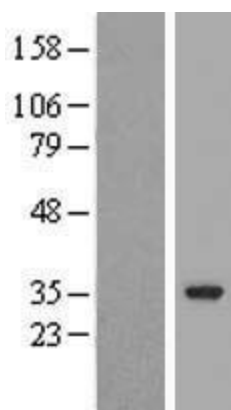
MW: 32.5 kDa

Gene Summary: Required for normal motor neuron development (By similarity). Required for autophagosome formation (PubMed:30093494).[UniProtKB/Swiss-Prot Function]

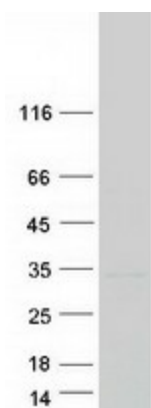
Product images:



Circular map for RC216351



Western blot validation of overexpression lysate (Cat# [LY414863]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC216351 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified TMEM41B protein (Cat# [TP316351]). The protein was produced from HEK293T cells transfected with TMEM41B cDNA clone (Cat# RC216351) using MegaTran 2.0 (Cat# [TT210002]).