

Product datasheet for RC201134

Tropomodulin 1 (TMOD1) (NM_003275) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Tropomodulin 1 (TMOD1) (NM_003275) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Tropomodulin 1
Synonyms:	D9S57E; ETMOD; TMOD
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC201134 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGTCGTACAGACGAGAAGCTAGAGAAATACCGTGACCTGGATGAAGATAAAATCCTTGGAGCCCTAACAG
AGGAAGAGCTGAGGACCCTGGAAAATGAGCTGGATGAGCTGGACCCTGATAATGCACTGCTGCCTGCAGG
CCTGAGGCAGAAGGATCAGACCACCAAGGCGCCACGGGCCCTTTAAAAGAGAGGAGCTCTTGGATCAC
TTGGAAAAGCAAAGGAGTTAAGGACCGAGAAGATCTGGTCCCCTACACAGGGGAAAAACGAGGAA
AGGTCTGGTTCCCTAAGCAGAAGCCACTGGATCCTGTGCTGGAAAGTGTGACGCTGGAACCGGAGCTGGA
GGAAGCCTTGGCAAATGCTTCAGATGCAGAACTCTGTGACATTGCAGCGATCCTGGGCATGCACACGCTC
ATGAGTAACCCAGCACTACTACCGCCCTGAGCAGCAGCTCCATCATGAACAAGGAGGGCTCAACAGCG
TGATTAACCCACACAATACAAGCCTGTGCCGACGAAGAACCAATTCACAGACGTAGAGGAAACGCT
GGAACGGATAAAGAACAACGACCCAAAACCTTGAAGAAGTTAACCTCAATAATATCCGGAATATCCCCATC
CCCACCTCAAGGCATATGCAGAAGCCCTGAAAGAAAACATATGTGAAGAAGTTCAGCATCGTGGGGA
CACGGAGTAATGACCCCGTGGCGTATGCCCTTGTGAGATGCTCAAGGAGAACAAGGTGTTGAAGACACT
GAATGTGGAATCCAACCTCATTTCTGGAGCTGGGATTCTGCGCCTGGTAGAAGCCCTCCCATAACAACACT
TCTCTGGTGGAAATGAAAATTGACAACCCAGAGCCAGCCCTGGGCAACAAGTGGAAATGGAGATTGTGA
GCATGTTGGAAAAAACGCAACACTTCTCAAATTCGGCTACCATTACCCAGCAAGGACCCCGGCTTCG
GGCATCCAACGCAATGATGAACAACAATGACCTTGTGAGGAAGAGGAGGCTTGGCAGCTGACTGGGCC
ATCATTCCAAGTGCCGGAGTGGTGTC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTAA



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Protein Sequence: >RC201134 protein sequence
Red=Cloning site Green=Tags(s)

MSYRRELEKYRDLDEDKILGALTEELRTLENELDELDPDNALLPAGLRQKDQTTKAPTGPFKREELLDH
 LEKQAKEFKDREDLVPYTGKRGKVVWPKQKPLDPVLESVTLEPELEEEALANASDAELCDIAAILGMHTL
 MSNQYYQALSSSSIMNKEGLNSVIKPTQYKVPDEEPNSTDVEETLERIKNNDPKLEEVNLNIRNIPI
 PTLKAYAEALKENSYVKKFSIVGTRSNDPVAYALAEMLKENKVLKTLNVESNFISGAGILRLVEALPYNT
 SLVEMKIDNQSQPLGNKVEMEIVSMLEKNATLLKFGYHF TQQGPRLRASNAMMNNNDLVRKRRLADLTGP
 IIPKCRSGV

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6403_e10.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_003275

ORF Size: 1077 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_003275.4](#)

RefSeq Size: 3352 bp

RefSeq ORF: 1080 bp

Locus ID: 7111

UniProt ID: [P28289](#)

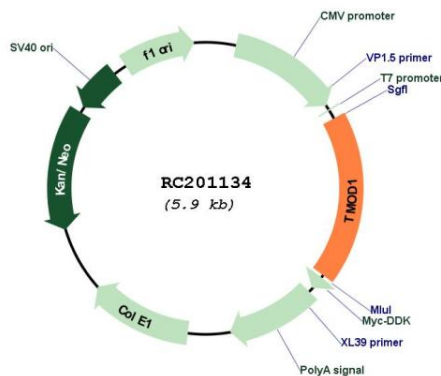
Cytogenetics: 9q22.33

Domains: Tropomodulin

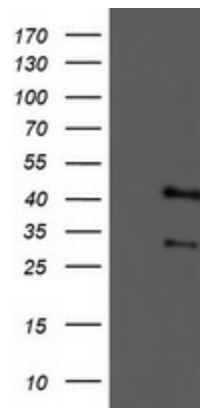
MW: 40.6 kDa

Gene Summary: This gene encodes a member of the tropomodulin family. The encoded protein is an actin-capping protein that regulates tropomyosin by binding to its N-terminus, inhibiting depolymerization and elongation of the pointed end of actin filaments and thereby influencing the structure of the erythrocyte membrane skeleton. Multiple transcript variants encoding the same protein have been found for this gene. [provided by RefSeq, Oct 2009]

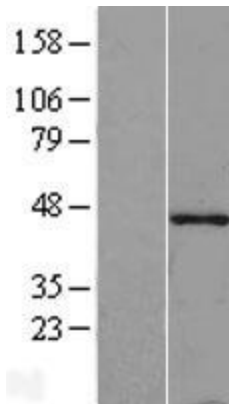
Product images:



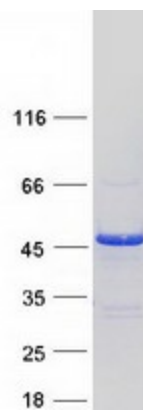
Circular map for RC201134



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY TMOD1 (Cat# RC201134, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-TMOD1(Cat# [TA503170]). Positive lysates [LY418797] (100ug) and [LC418797] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY431319]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with [RC228291] using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified TMOD1 protein (Cat# [TP301134]). The protein was produced from HEK293T cells transfected with TMOD1 cDNA clone (Cat# RC201134) using MegaTran 2.0 (Cat# [TT210002]).