

Product datasheet for **RC227766**

Tropomodulin 2 (TMOD2) (NM_001142885) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Tropomodulin 2 (TMOD2) (NM_001142885) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Tropomodulin 2
Synonyms:	N-TMOD; NTMOD
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC227766 representing NM_001142885 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCACTCCCCTTTCAAAAAGAGCTGGAGAAATACAAGAACATTGATGAAGATGAGCTTCTTGCCAAAC
TCTCAGAAGAGGAACTGAAACAGTTGGAAAATGTTCTAGATGACCTAGATCCTGAGAGTGCCATGCTGCC
AGCTGGATTTTCGACAGAAAGACCAGACACAGAAGGCAGCCACCGCCCTTTGACCGCGAGCACCTCCTC
ATGTACCTGGAGAAGGAGGCTTTGGAACAGAAAGACAGAGAGGACTTTGTGCCCTTCACTGGAGAAAAGA
AAGGGAGAGTCTTTATCCCTAAAGAAAAGCCTATAGAACTCGTAAAGAAGAAAAGTGACCTTGACCC
AGAACTGGAGAAGCTTTGGCCAGTGCCTCTGACACCGAACTCTATGATCTTGCAGCTGTCTTGGAGTA
CACAATTTGCTCAACAATCCAAAGTTTCGATGAAGAAACAGCCAACAATAAAGGTGGCAAAGGACCTGTCA
GAAATGTTGTCAAAGGTGAAAAGTAAAGCCAGTATTTGAGGAACCACCAATCCACAAAATGTGAAAAT
AAGCCTGCAGCAGATGAAAGCCAATGATCCTAGCTTGCAAGAAGTCAACCTCAACAACATTAAGGCTTTT
GCAGACATGCTGAAAGTAAACAAGACCTTGACAAGTCTAAACATAGAATCCAATTTATCACTGAACTG
GGATCCTGGCCCTGGTAGAGGCACTGAAAGAAAATGACACCTTGACAGAAATCAAGATTGACAACCAGAG
GCAGCAGTTGGGAACAGCTGTAGAGATGGAATTGCCAGATGCTGGAGGAGAATTAAGGATCCTCAAG
TTTGGATACCAGTTTACCAAGCAAGGCCACGAACAAGGTTGGCAGCTGCCATCACAAGAATAATGACC
TGGTTCGTAAGAAGAGAGTTGAAGCAGACCGAAGG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC227766 representing NM_001142885
Red=Cloning site Green=Tags(s)

MALPFQKELEKYKNIDEDELLGKLSEELKQLENVLDDLDPE\$AMLPAGFRQKDQTQKAATGPF\$DREHLL
 MYLEKEALEQKDREDFVPFTGEKKGRVFIPKEKPIETRKEEKVTL\$DPELEEALASASDTELYDLA\$AVLGV
 HNLLNNPKFDEETANNKGGKGPVRNVVKG\$EKVKPVFEEPPNPTNVEISLQ\$QMKANDPSLQEVN\$LNNIKAF
 ADMLKVNKTLTSLNIESNFITGTGILAL\$VEALKENDTLTEIKIDNQR\$QLGTA\$VEM\$EIAQMLEEN\$SRILK
 FGYQFTKQGP\$RTRVAAAITKNNDLV\$RKKRVEADRR

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk8051_d05.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_001142885

ORF Size: 945 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_001142885.2](#)

RefSeq ORF: 948 bp

Locus ID: 29767

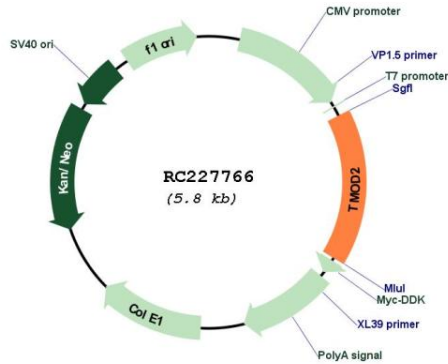
UniProt ID: [Q9NZR1](#)

Cytogenetics: 15q21.2

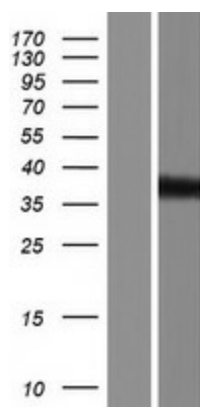
MW: 35.5 kDa

Gene Summary: This gene encodes a neuronal-specific member of the tropomodulin family of actin-regulatory proteins. The encoded protein caps the pointed end of actin filaments preventing both elongation and depolymerization. The capping activity of this protein is dependent on its association with tropomyosin. Alternatively spliced transcript variants encoding different isoforms have been described. [provided by RefSeq, Dec 2008]

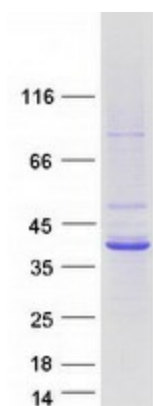
Product images:



Circular map for RC227766



Western blot validation of overexpression lysate (Cat# [LY428294]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC227766 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified TMOD2 protein (Cat# [TP327766]). The protein was produced from HEK293T cells transfected with TMOD2 cDNA clone (Cat# RC227766) using MegaTran 2.0 (Cat# [TT210002]).