

Product datasheet for **MR210046**

Thop1 (NM_022653) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Thop1 (NM_022653) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Thop1
Synonyms:	A1131655; A1327041; EP24.15
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**ORF Nucleotide
Sequence:**

>MR210046 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGAAGCCCCCGCAGCCTGTGCTGGGACGTGGTGGATGCAGCATCCCCAGCCTCCACTGTGAATCATC
 TTCGCTGGGATCTGAGCGCACAGCAGATCAGGGCTCTAACCACGCAGCTCATCGAGCAGACCAAGTGTGT
 GTACGACCGAGTGGGTGCTCAGAACTTCGAGGATGTGTCGTATGAGAGCACACTGAAGGCACTGGCTGAC
 GTGGAGGTACCTACACAGTGCAGAGGAACATTCTCGACTTCCCCAACACGTGTCCCCGTGCAAGGACA
 TCCGTGCAGCCAGCACAGAGGCTGACAAGAAGCTCTGGAGTTTGTATGTAGAGATGAGCATGAGACAGGA
 CGTGTACCAGAGGGTCTGTGGCTGCAGGAGAAAACCCGAAAGATTCCCTGAAGCTGAAGCAGCTCGC
 TACCTGGAGCGGCTCATCAAGCTGGGCCGAGAAACGGCTCCACTTACCTCAGGACACACAAGAGAAGA
 TCAAGAACATCAAGAAGAGGCTGAGCCTGCTGTGCATCGACTTCAACAAGAACCTCAACGAGGACACCAC
 CTTCTGCCCTTACAAGAGAGGAGCTGGGTGGGCTCCCGAGGACTTTCTGAGCTCTCTGGAGAAGGCA
 GAGGATGGCAAGCTGAAGGTACCCCTCAAGTACCCTCACTACTTCCCGCTGTTGAAGAAGTGCCATGTGC
 CAGAGACACGACGCCCTGTTGGAGGAGGCCTTCAACTGTCGCTGCAAGGAGGAGAAGTGTGCAATTCTGAA
 GGAGCTAGTGTCCCTGCGAGCACAGAAGTCCAGCCTGTTGGGGTCCACACACACGCGGACTACGTCCTG
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 CCCTGGGTGAGCAGGAGCGCGGGTCACTCTGGAGCTGAAGGAGGAGAGTGCGCCAAGCGGGGACTGCC
 ATTCGACGGGCGCATCCACGATGGGACATGCGCTACTACATGAACCAGGTGGAGGAGACTCGCTATCGT
 GTGGACCAGAACCTGCTGAAGGAGTACTCCCCATGCAGGTGGTACACGTGGGCTGTGGCCACTTACC
 AAGACTGCTGGGGCTGACCTTACGCTGGAGGAAGGTGCCGCTGCCTGGCAGGAGACGTGCGGCTCTA
 CTCAGTGCGGGACGCGCCCTCTGGAGAGGAGATCGGCAAGTTCTACCTCGACCTATACCCAGGGAAGGG
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 TTCAGTGGGACCCAGTGGAGCGGGACTTTGTGGAGGCGCCGTCACAGATGCTGGAGAAGTGGGTGTGGG
 AGAAGGAGCCCTGATGCGCATGTCTCAGCACTACCGCACGGCAGCGAGGCCCTCAGGACCTCCTGGA
 GAAGCTCATCAAGTCTCGCCAGGCAATGCAGGTCTTCAACCTGCGGCAGATTGTGCTTGCCAAGGTG
 GATCAGGTCTGCACACAGACAGACGACGACCCGGCTGAGGAATATGCCCGGCTCTGCCAAGAGATCC
 TCGGGGTGCCAGCCACACAGGTACCAACATGCCAGCCACTTTCGGCCACCTAGCTGGCGGCTATGATGC
 TCAGTACTATGGTACTTATGGAGCGAAGTGTACTCGATGGACATGTTCCACACACGCTTCAAGCAAGAG
 GGTGTGCTTAGCCCCAAGGTTGGCATGGACTACAGGACCAGCATCCTGAGGCCAGGGGGCTCTGAGGACG
 CCAGCGCATGCTGAAGCAGTTCCTGGCCGCGACCCCAAGCAGGACGCCTTCTCTGAGCAAGGGTCT
 GCAGGTGGAGGGCAGCGAGGCGCCTGCGTGC

ACGCGTACGCGGGCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >MR210046 protein sequence
Red=Cloning site Green=Tags(s)

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MKPPAACAGDVVDAASPASTVNHLRWDL SAQQIRALTTQLIEQTKCVYDRVGAQNFEDVSYESTLKALAD
VEVYTYTVQRNILDFPQHVSPCKDIRAASTEADKKLSEFDVEMSMRQDVYQRVWVLQEKTPKDSLKPEAAR
YLERLIKLGRRNGLHLPQDTQEKIKNIKKRLSLLCIDFNKNLNEDTTFLLPFTREELGGLPEDFLSSLEKA
EDGKLVTLKYPHYFPLLKCKHVPETRRLLLEAFNCRCKEENCAILKELVSLRAQKSSLLGFHTHADYVL
EMNMAKTSQTIVATFLDELAQKLKPLGEQERAVILELKEAECARGLPFDGRIHAWDMRYMNVQVEETRYR
VDQNLKKEYFPMQVVTGRLLAIIYQELLGLTFTLEEGAAAWHEDVRLYSVRDAASGEEIGKFYLDLYPREG
KYGHAACFGLQPGCLRQDGRSLAVAAMVANFTKPTDAPSLQHDEVETVYHEFGHVMHLCSQAEFAM
FSGTHVERDFVEAPSQMLENVWVEKEPLMRMSQHYRTGSEAPQDLLEKLIKSRQANAGLNLRQIVLAKV
DQVLHTQTDADPAEEYARLCQEILGVPATPGTNMPATFGHLAGGYDAQYYGYLWSEVYSMDMFHTRFKQE
GVLSPKVGMDYRTSILRPGGSEDASAMLKQFLGRDPKQDAFLLSKGLQVEGSEAPAC
  
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TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

SgfI-MluI

Cloning Scheme:



ACCN: NM_022653

ORF Size: 2064 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_022653.1](#), [NM_022653.2](#), [NM_022653.3](#), [NM_022653.4](#), [NP_073144.2](#)

RefSeq Size: 2585 bp

RefSeq ORF: 2064 bp

Locus ID: 50492

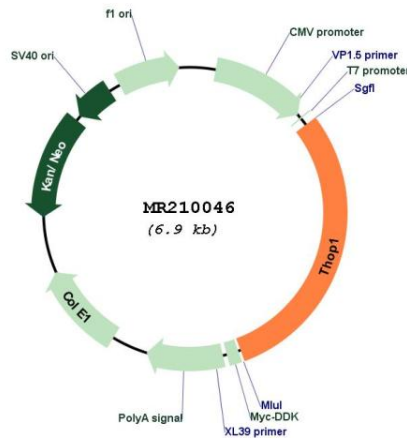
UniProt ID: [Q8C1A5](#)

Cytogenetics: 10 39.72 cM

MW: 78 kDa

Gene Summary: Involved in the metabolism of neuropeptides under 20 amino acid residues long. Involved in cytoplasmic peptide degradation. Able to degrade the amyloid-beta precursor protein and generate amyloidogenic fragments (By similarity).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR210046