

Product datasheet for **MR209815**

Thoc1 (NM_153552) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Thoc1 (NM_153552) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Thoc1
Synonyms:	3110002N20Rik; AW107452; NMP-84
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



[View online »](#)

ORF Nucleotide
Sequence:

>MR209815 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGTCCTCCGACGCCGCGCTTTTCAGTTTGCCGGAGGCGCGGACGCGATTACGAAATCTACCAGAGAAG
CCTTGAATAACAAAAATATCAAGCCGTTGTTGACTGCCTTCAGTCAGTTACCTGGCAGTGAAAAATGAAAA
AAAATGTACCTTGACCAAGCTTTCAGAGGTGTTCTGGAAGAAGAAATTATAAATCATTCCGCATGTGAG
AACGTTTTAGCTATTATTTCTCTTGCTATTGGGGAGTGACCGAAAGTGTGTACTGCGTCCACACCAT
TTGTGCTATTGGGAGATGCTTAGACTGCCTTCTTTGGATCAGTGTGACACAATATTCACCTTTTGTGA
AAAAATGTTGCTACTTGAAGTCAAATACATTCTATTCTGCTGGCAAAAATATTTACTGCGTATGTGC
AATGATCTCCTCAGAAGATTGTCTAAATCTCAGAATACAGTTTTCTGTGGAAGAATTCAGCTCTTTTGG
CCAGGCTTTTTCTCTATCTGAGAAATCAGGTCTTAATTTGCAGAGTCAGTTAACCTGGAAAACGTCAC
TGTTTTCAATACAAACGAGCAGGAGAGCACCTGGGTGAGAAGCATAACCGAGGATAGAGAGGAAGGGATG
GATGTAGAAGAAGGTGAAATGGGAGATGATGAAGCCCCGACAACCTGTTCTATTCCAATTGATTACAACC
TGTATAGAAAATCTGGTCACTTCAGGATTACTTCAGGAACCCAGTACAATGCTATGAGAAGATTTCTTG
GAAAACGTTTCTCAAGTATTCTGAAGAAGTTTTAGCTGTTTTTAAAAGTTATAAATTAGATGATACTCAA
GCCTCCAGGAAAAAGATGGAAGAATTGAAAACAGGAGGAGAGCATGTATACTTCGCCAAGTTTCTAACGA
GTGAAAAGTTGATGGATTTACAACCTGAGTGACAGTAACTTTCTGTCGACACATCCTGTTGCAGTATCTCAT
TTTATTTCAATATCTCAAGGGACAGGTCAAATTCAAAAGTTCAAATATGTTTTAACTGATGAGCAATCA
CTCTGGATTGAAGATACTACAAAATCAGTCTACCAACTGCTATCTGAAAAATCCCCCTGATGGAGAAAAGT
TTTCAAAGATGGTAGAGCATATATTAACACTGAGGAAAATTTGAACTCATGGAAGAATGAAGTTGCCC
AAGTTTTGTAAAGAAAGAGCGTCAGATACCAAGCCACAAAGAGTGGTGAGGAAGAGAGCAGCCCCAGAA
GACTTCTTAGGCAAAGGGCCCAACAAGAAAATCCTCATTGGAAAATGAGGAGCTCAACAAGGCTTTGGAATC
TCTGCTCTGATAATATGGAAGCTGTAATCAGAGACAAGAGAATACATGCCAACTTTGGAGGAGTTCTT
TGAAGAAGCTATTGAACAAGCAGATCCTGAAAACATGGTTGAAAGTGAATATAAGCCGTAATAATTCA
AATTATGGATGGAGAGCTTTAGACTCTTAGCCCGGAGAAGCCCTCACTTCTTTCAGCCAACCAACCAGC
AGTTTAAAGAGTCTACCAGAGTATCTGGAAAACATGGTGATAAAGCTGGCCAAGGAACTACCACCCCTTC
TGAAGAAATAAAGACAGGTGAGGATGAAGACGAGGAAGATAATGATGCTTTACTAAAGGAAAATGAAAGT
CCAGATGTTCCGGCAGATAAACCTATAACAGGGGAGCAGATAGAGTCATTTGCCAACAACTTGGTGAGC
AGTGAAGATTTTGGCTCCTTACCTGAAAATTAAGACTCTGATATTAGGAGATTGAGTGTGACAGTGA
AGACATGAAGATGAGAGCCAAGCAGCTCCTTGTTCCTGGCAAGATCAAGAAGGAGTTTATGCAACAAC
GATAACCTGATTAGTGCATAAACAAGTCTGGATTAAGTGACCTTGCAGAAAAGTCTAACTAATGACACTG
AAACAAACAGT

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >MR209815 protein sequence
 Red=Cloning site Green=Tags(s)

MSPTPALFSLPEARTRFTKSTREALNNKNIKPLLTAFSQLPGENEKKCTLDQAFRGVLEEEIINHSAE
 NVLAIISLAIGGVTE SVCTASTPFVLLGDVLDCLPLDQCDTIFTFVEKNVATWKSNTFY SAGKNYLLRMC
 NDLLRRLSKSQNTVFCGR IQLFLARL FPLSEKSLNLQSQFNLENVTVFNTNEQESTLGQKHTEDREEGM
 DVEEGEMGDDEAPTTCSIPIDYNLYRKFWSLQDYFRNPVQCYEKISWKTFLKYSEEVLAVFKSYKLDLDTQ
 ASRKKMEELKTGGEHVYFAKFLTSEKLMQLSDSNFRRHILLQYLILFQYLKGQVKFKSSNYVLTDEQS
 LWIEDTTKSVYQLLSENPPDGERFSKMVEHILNTEENWNSWKNEGCPSFVKERASDKPTRVVRKRAAPE
 DFLGKGPNKKILIGNEELTRLWNLCPDNMEACKSETREYMP TLEEF FEEAIEQADPENMVESEYKAVNNS
 NYGWRALRLLARRSPHFQPTNQFKSLPEYLENMVIKLAKELPPPSEEIKTGEDEDEEDNDALLKENES
 PDVRRDKPITGEQIESFANKLGEQWKILAPYLEIKDSDIRQIECDSEDMKMRKQLLVAWQDQEGVHATT
 DNLI SALNKSGLSDLAESLTNDTETNS

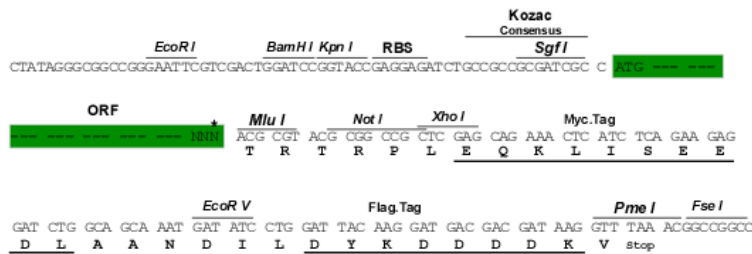
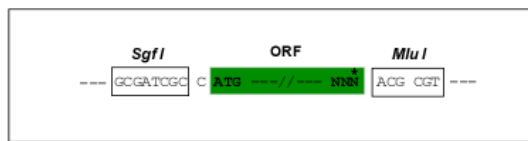
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

Cloning Scheme:

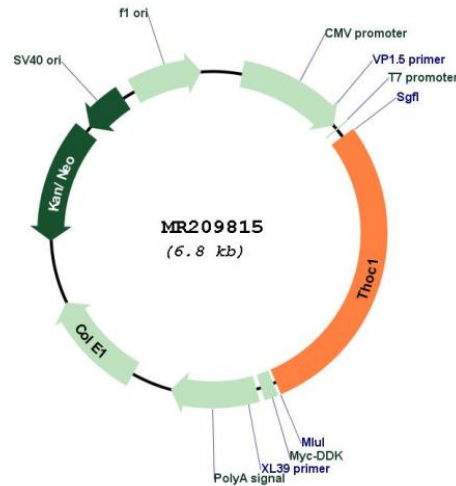
SgfI-MluI

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

Plasmid Map:



ACCN: NM_153552

ORF Size: 1974 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_153552.1](#)

RefSeq Size: 3855 bp

RefSeq ORF: 1974 bp

Locus ID: 225160

UniProt ID: [Q8R3N6](#)

Cytogenetics: 18 A1

MW: 75.4 kDa

Gene Summary: Required for efficient export of polyadenylated RNA. Acts as component of the THO subcomplex of the TREX complex which is thought to couple mRNA transcription, processing and nuclear export, and which specifically associates with spliced mRNA and not with unspliced pre-mRNA. TREX is recruited to spliced mRNAs by a transcription-independent mechanism, binds to mRNA upstream of the exon-junction complex (EJC) and is recruited in a splicing- and cap-dependent manner to a region near the 5' end of the mRNA where it functions in mRNA export to the cytoplasm via the TAP/NFX1 pathway. Regulates transcriptional elongation of a subset of genes. Involved in genome stability by preventing co-transcriptional R-loop formation (By similarity).[UniProtKB/Swiss-Prot Function]