

Product datasheet for **RR217663**

Thoc2 (NM_001191756) Rat Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Thoc2 (NM_001191756) Rat Tagged ORF Clone
Tag: Myc-DDK
Symbol: Thoc2
Synonyms: RGD1561623
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
Cell Selection: Neomycin
ORF Nucleotide Sequence: >RR217663 representing NM_001191756
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCGGCCGCGACTGTGGTGGTCCCGCAGAGTGGATAAAGAACTGGGAGAAATCAGGGAGAGGCGATT
TTTTGCATTTATGCCGGATTCTCAGTGAACAAAAGCCATGACAGTTCGACCTACAGAGATTTTCAGCA
AGCTCTCTATGAGTTGCATACCATGTCATTAAGGGAAATTTAAAGCACGAACAGGCATCCAGTGTCTTT
AATGACATTAGTGAATCCGTGAGGATATGCCTTCTATCCTTGCTGACGTGTTCTGCATATTAGATATTG
AGACAAATTTGTTAGAAGAAAAAGCAAGAGAGACTATTTTACACAATTGGTATTAGCATGTTTGTATTT
AGTTTCAGACACAGTTCTGAAGGAACGATTGGATCCAGAACTTTGGAATCTTTAGGGCTTATCAACAA
TCACAGCAGTTCAACCAAAAGTCAGTAAAAATCAAGACAAAACCTTTTTATAAGCAGCAAAAATTC AATT
TATTAAGAGAAGAAAATGAAGTTATGCCAAGCTGATTGCTGAAGTGGGCAAGATTTATCTGGAAGTAT
TACTAGTGATTTAATATTAGAAAATATCAAATCTTTAATAGGATGCTTTAATCTGGATCCCAATAGAGTT
TTGGATGTCATTTAGAAGTATTTGAATGCAGGCCAGAACATGATGACTCTTTATATCGTTATTAGAGT
CTTACATGAGTATGTGTAACCAACAACTGTGCATATTCTTGATTCAAATTCAGTTTATCAGGA
ACCAAGTGGTGAGACGCCCTCGTCTTTGTACAGAGTTGCAGCAGTCTTCTGCAATTTAATCTCATTGAT
CTAGATGATCTTTATGTACATCTCTCCAGCTGATAATTGTATTATGGATGAATACAAACGAGAAATTG
TGAAGCTAAGCAAATTTAAGAAAACCAATGGTTGACTGTCTTCTGAAAACTTGATGAACGAGA
CAAAGAAAAGGATAAAGATGACGAGAAAGTAGAAAAGCCACCTGACAACCAAAAACCTTGGTTTGTGGAA
GCTTTGTTAAAGATTGGTATTGGCAGCATGCACAGAACATCATGGATCAGATGCCTCCGCTACTATGCAG
CTTCACATAAGCTAATAGCTCTTGCTATTTGCAAGCTCATTACATAACTGTCGAGCCTCTCTACCGAAG
AGTTGGTGTCTAAAGGTGCTAAAGGCTCACCCGTTAGTGCTTTGCAAAAATAAGAGAGCACCGAAGCAA
GTAGAGAGCTTTGAAGATTTGAGGAGGGATGTATTCAATATGTTCTGCTACCTTGGTCTCACCTCTCAC
ATGATCCCATTTATTTGCAAAAAGTCGTGCGCATAGGCAAGTCATTTATGAAGGAGTTTCAGTCTGATGG
AAGCAAACAAGAAGATAAAGAGAAAACGGAAGTTATCCTTAGCTGTTTACTTAGCATTACTGACCAGGTA
TTACTTCCATCTCTCTTTGATGGACTGCAATGCTTGCATGTCTGAGGAACTGTGGGAAATGTTCAAGA



[View online >](#)

CATTTCCTATCAGCATAGATATCGTCTATATGGCCAGTGAAGAATGAACTTATAATGGGCACCCACT
 TTTAGTAAAAGTTAAAGCTCAAACAATAGACCGAGCCAAGTATATCATGAAGCGTCTAACCAAGGAAAA
 GTGAAGCCTTCGGGAAGACAAAATGGCAAGCTGAGCCATAGTAATCCAACAATTTTGTGGATTATATCT
 TGTCAAAAATCCAGAAATATGATAACTTAATAACACCTGTAGTAGATTTCATTGAAATACCTCACTTCATT
 GAATTATGATGTCTTGGCCTATTGTATCATTGAAGCTTAGCTAATCCAGAAAAGGAGAGAATGAAACAT
 GATGACACAACCATCTCAAGCTGGCTTCAAAGTCTGGCAAGTTTCTGTGGTGCAGTATCCGTAATAACC
 CAATCGATCTTGGTGGTCTTCTTCAGTATGTAGCCAATCAATTAAGGCAGGCAAAAGTTTGACCTACT
 AATATTGAAAAGAAGTGGTACAAAAAATGGCAGGAATCGAAATTACAGAGGAGATGACGATGAGCAGTTA
 GAGGCCATGACTGGTGGGAGCAGCTGAAGGCTGAGGGTGGTTATTTTCGGCCAGATCAGAAAACACTAAAA
 AATCTTCTCAGAGATTAAGGATGCACTACTGGACCATGATCTTGTCTTCTCTCTGTTTGCTCATGGC
 ACAACAGAGGAATGGGGTAATTTTTCAGGAGGGTGGAGAGAAACACTTGAACTTGTGGGAAGCTCTAT
 GACCAGTGTATGATACCTAGTACAGTTTGGTGGGTTTTAGCATCAAATCTAAGTACAGAAGATTATA
 TAAAACGAGTGCCTTCAATTGATGTCTGTGAATGAATTTACACCTCACGATGCAGCATTTTTTCT
 GTCTAGGCCAATGTATGCACACCATATTTTCATCAAAAACGATGAACTTAAAAAATCAGAAAAGGGAAGT
 AAACAGCAACATAAAGTCCATAAATACATTACATCATGTGAAATGGTGTATGGCACCTGTCCATGAAGCAG
 TGGTCTCCTTGCATGTTGCCAAAAGTCTGGGATGATATCAGCCCTCAGTTCTATGTACATTTTTGGTGGT
 GACAATGTATGACCTTGCACTTCCACATACCAGCTATGAAAGAGAAGTCAATAAACTTAAAGTCCAGATG
 AAAGCGATTGATGACAATCAGGAAATGCCTCCAAATAAAAAGAAGAAAAGAAAAGGAGCGTTGCACGGCCC
 TTCAGGACAAGCTCCTTGAAGAAGAAAAGAACGAGATGGAACATGTTTCAGAGAGTACTTCAGAGACTGAA
 ACTAGAGAAAAGACAACCTGGCTTTTAGCAAAAGTCTACCAAAAATGAGACCATCACAAAATTTTACAGCTG
 TGTATATTTCTCGATGCATTTTTTTCAGCAATTGATGTGTTTATTGTGCTCGTTTTTGTGAATTGGTAC
 ATCAACAGAAAACCTCAAATTTTTCCACACTTCTTTGCTATGATCGAGTTTTTCTGACATAATTTACAC
 GGTGCAAGCTGCACTGAAAATGAAGCTAGTCGGTATGGGAGATTCCTTTGCTGTATGTTAGAGACAGTG
 ACCAGGTGGCATAGTGATAGAGCCACTTATGAGAAGGAATGTGGAAACTATCCAGGATTCCTTACCATAT
 TACGGGCAACTGGATTTGATGGTGGAAACAAGCTGATCAGTTAGATTATGAAAATTTTCGACATGTTGT
 CCACAAATGGCATTACAATTAACCAAGGCCTCGGTTTCATTGCCTTGAGACAGGCGAATATACTCACATC
 AGGAATATATTGATTGTGCTAACAAAAAATCTTCTTGGTACCAAAAAGTTTTGAATCTGGGTGAGGCTT
 TGGAAAGAAGAGTGAATAAAATATGCCAAGAAGAAAAGAGAAGAGGCCAGATCTTTATGCATTGGCTAT
 GGGCTACTCGGGCAGTTGAAAAGTAGAAAGTACACATGATACCTGAAAATGAATTTATCACAAAGGAT
 CCTCTCCAAGGAATGCTGTTGCCAGTGTACAAAATGGGCCTGGTGGTGGGACTTCTTCATCATCCATAG
 GAAGTGCCTCAATCAGATGAAAGCGGTGCTGAGGAGACTGATAAATCAAGGGAGAGATCTCAGTGTGG
 TACAAAAGCTGTTAATAAGGCTTCTAGTACCACACCAAAAAGGGAATTCAAGCAATGGAAATAGTGGCTCT
 AACAGCAACAAAGCTGTTAAGGAAAATGACAAAAGAAAAGTAAAAGAGAAAAGAAAAGAGAAAAAGAGA
 AGACTCCAGCTACAACCTCCAGAGGCCAGGGTACTTGGTAAAGAAAAGTAAAGAAAACCGAAGGAAGAGCG
 GCCAAATAAAGATGACAAAGCAAGAGAGACAAAGGAAAGAACACCTAAATCTGACAAAGAGAAGGAGAAG
 TTCAAGAAAGGAAGAAAAGCAAAAGATGAGAAATCAAGACCACTGTCCCAGCGTAGAATCAAAATCGA
 CTCAAGAAAGGGAAGAGAGAAGGAGCCATCCAGAGAAAGAGATGTAGCAAAAGGAATGAAGTCAAAGGA
 AAATGTTAAAGGAGGAGAAAAACCACAGTTTCAGGGTCTTGAAGTCACTGTTCCCCGATCAGATATC
 TCGGAGCCTGACAGAGAACAAAAACGCCGCAAAATTTGATACTCATCCTTCCATCACATTCCTCCACTG
 TAAAGGACAGTCTCATCGATCTCAAGGACTCTCAGCAAAGCTTACATTAACCATAATCTCCACCCT
 GTCCAAGAGTAAGGAGAGAGAAATGGACAAGAAAGATTTGGACAAGTCAAGGGAAGATCCAGAGAAAGA
 GAGAAAAAAGATGAAAAGGACAGGAAAGAGCGGAAAAGGGATCATTCAAACAATGACCGTGAAGTCCAC
 CGGACATAACAAAGAGCGGAAAGAGGAGAATGGAAACAATGGGGTTTCAAAAACAAAAAGTGAAGTCC
 ATGTGAGTCTCAATATCCAAATGAGAAAGACAAAGAGAAAAAATAGTCAAATCTCAGGCAAGAAAAA
 GGCAGTAGTGATTCGTTTAAATCTGAGAAGATGGATAAAATCTCCTCTGGTGGCAAAAAGGAATCCAGGC
 ATGATAAAGAAAAGATAGAAAAGAAAAGAAAACGGGATAGTTCAGGAGGAAAAGAGAAGAAACATCA
 TAAGTCTCTGACAAGCACAGA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RR217663 representing NM_001191756
 Red=Cloning site Green=Tags(s)

```

MAAATVVVPAEWIKNWEKSGRGDFLHLCRILSENKSHDSSTYRDFQQALYELSYHVIKGNLKHEQASSVL
NDISEFREDMPSILADVFCILDIEIETNCLLEEKSKRDYFTQLVLAACYLVSQVTLKERLDPETLESGLIKQ
SQQFNQKSVKIKTKLFYKQKFNLLREENEGYAKLIAELGQDLSGTITSDILENIKSLIGCFNLDPNRV
LDVILEVFECEPEHDDFFISLLESYMSMCEPQTLCHILGFKFKFYQEPSGETPSSLYRVAAVLLQFNLD
LDDLIVHLLPADNCIMDEYKREIVEAKQIVRKLTMVVLSSSEKLDERDKEKDKDDEKVEKPPDNQKLGLE
ALLKIGDWQHAQNIHQMPYYAASHKLIALAIKLIHITVEPLVRRVGVKPKGAKGSPVSALQNKRAPKQ
VESFEDLRRDVFNMFCYLGPHLSHDPILFAKVVRIGKSFMEFQSDGSKQEDKEKTEVILSCLLSITDQV
LLPSLSLMDCNACMSEELWGMFKTFPYQHRYRLYGQWKNETYNGHPLLKVKVAQIDRAKYIMKRLTKEN
VKPSGRQIGKLSHNPITLFDYILSQIQKYDNLITPVVDSLKYL TSLNYDVLAYCIEEALANPEKERMKH
DDTTISSWLQSLASFCGAVFRKYPIDLAGLLQYVANQLKAGKSFDLLILKEVVQKMGAGIEITEEMTMEQL
EAMTGGELKAEAGGYFGQIRNTKKSSQRLKDALDHDLDLPLCLLMAQQRNGVIFQEGGKHLKLVGKLY
DQCHDTLVQGGFLASNLSTEDYIKRVPSIDVLCNEFHTPHDAFFLSRPMYAHHISSEYDELKSEKGS
KQKHVKHYITSCVMVAPVHEAVVSLHVAKVWDDISPQFYATFWSL TMYDLAVPHTSYEREVNLKLVQM
KAIDDNQEMPPNKKKKEKERCTALQDKLLEEEKQMEHVQVRLQRLKLEKDNWLLAKSTNETITKFLQL
CIFPRCIFSAIDAVYCARFVELVHQKTPNFSTLLCYDRVFSDIITYVASCTENEASRYGRFLCCMLETV
TRWHSRATYKECEGNYPGFLTILRATGFDGGNKADQLDYNFRHVHVKWHYKLTASVHCLTGEYTHI
RNILIVLTKILPWYPKVLNLGQALERRVNIKICQEEKEKRPDLYALAMGYSGQLKSRKSHMIPENEFHKKD
PPRNASVAVQNGPGGGTSSSSIGSASKSDESGAETDKSRERSQCGTKAVNKASSTTPKGNSSNGSGS
NSNKAVKENDKEKVKKEKEKEKEKTPATTPPEARVLGKESKEKPKKEERPKNDDKARETKERTPKSDKEKE
FKKEEKAKDEKFKTTVPSVESKSTQEREREKPSRERDVAKEMKSKENVKGGKPPVSGSLKSPVPRSDI
SEPDREQRRKIDTHPSHSSSTVKDSLIDLKSSAKLYINHNPPPLSKSKEREMDKDLKSRERSRER
EKKDEKDRKERKRDHNSNDREVPPDITKRRKEENGTMGVSKHKSESPCE SQYPNEKDKENKSKSSGKEK
GSSDSFKSEKMDKISSGGKESRHDKEKIEKKEKRDSSGGKKEKHHKSSDKHR
  
```

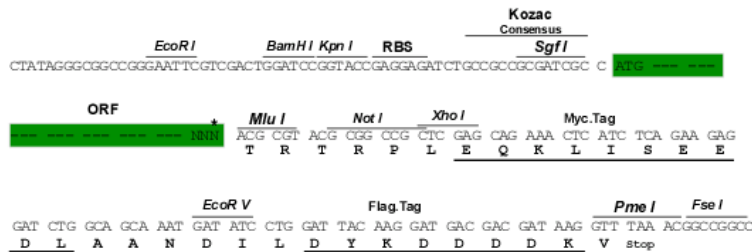
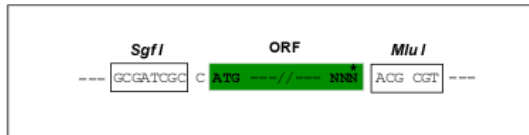
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

SgfI-MluI

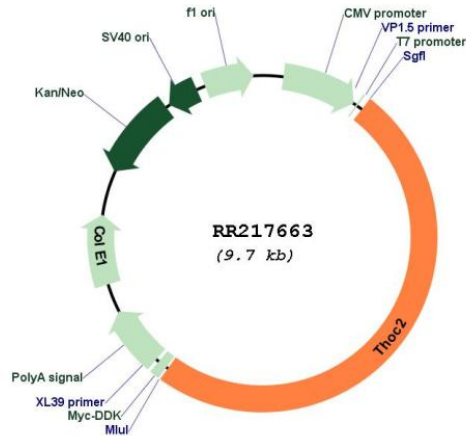
Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

Plasmid Map:



ACCN: NM_001191756

ORF Size: 4782 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_001191756.1](#), [NP_001178685.1](#)

RefSeq Size: 7636 bp
RefSeq ORF: 4785 bp
Locus ID: 313308
Cytogenetics: Xq35
MW: 182.7 kDa