

Product datasheet for **RC200891**

TRIM56 (NM_030961) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	TRIM56 (NM_030961) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	TRIM56
Synonyms:	RNF109
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>RC200891 representing NM_030961
 Red=Cloning site Blue=ORF Green=Tags(s)

CTATAGGGCGGCCGGGAATTCGTCTGACTGGATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCCGGCGC
 GCC

ATGGTTTCCACGGGTCCTCGCCCTCCCTCTGGAGGCCCTGAGCAGCGACTTCTGGCCTGTAATAATCT
 GCCTGGAGCAGCTGCGGGCACCCAAGACTGCCCTGCCTGCATACCTACTGCCAAGACTGCCTGGCACA
 GCTGGCGGATGGCGGCCCGCTCCGCTGCCCGAGTGCCGCGAGACAGTGCTGTGCCGCCGAGGGTGTG
 GCCTCCTCAAGACCAACTTCTTCGTCAATGGGCTGCTGGACCTGGTGAAGGCCCGGGCCTGTGGAGACC
 TCGCTGCCGGGAAGCCAGCCTGTGCCCTGTGCCCTGGTGGTGGCACCAGCACCGGGGGCCGCCAC
 GGCCCGGTGCCTGGACTGTGCCGATGACTTGTGCCAGGCTGTGCCGACGGGCACCGCTGCACCCGCCAG
 ACCCACACCCACCGCTGGTGGACCTGGTGGGCTACAGGGCCGGTGGTATGATGAGGAGCCCGGGAGC
 GCCAAGCGGCCAGTGTCCCAGCACCCCGGGGAGGCACTGCGCTTCTGTGCCAGCCCTGCTCACAGTT
 GCTGTGCAGAGAGTGCCGCTAGACCCACCTGGACCACCCCTGCCTGCCTCTGGCTGAAGCTGTGCGT
 GCCCGGAGGCCGGCCTGGAGGGACTGTGGCCGGTGTGGACAATAACCTGGTGGAGCTGGAGGCAGCGC
 GGAGGGTGGAGAAGGAGGCGCTAGCCCGCTGCCGGAGCAGGCGCCCGGTGGGACTCAGGTGGAGGA
 GGCGGCTGAGGGCGTCTCCGGGCCCTGCCTGGCCAGAAGCAGGAGGTGCTGGGGCAGCTACGAGCCAC
 GTGGAGGCTGCCAAGAAGCTGCTCGGGAGAGGCTGGCGGAGCTTGGAGGCCGGGAGCAGGTGGCCAGGG
 CGGCAGCCGCTTCCGCCCGGGTACTCAGCCTGGGGCAGAGGCGGAGATCCTCTCCCTGGAAGGGGC
 GATCGCACAGCGGCTCAGGCAGCTGCAGGGCTGCCCTGGGCACCAGGCCCGGCCCTGCCTGTCCCA
 CAGCTGGAGCTCCATCCTGGGCTCCTGGACAAGAACTGCCACCTTCTTCGGCTGTCTTTGAGGAGCAGC
 AGCCCCAGAAGGATGGTGGAAAGACGGAGCTGGTACCCAGGGAGGTGAGGAGAGCCAGAGCCGGAGGA
 GGATGAGCCGAAGACTGAGAGACAGGGTGGAGTCCAGCCCCAGGCCGGAGATGGAGCCAGACCCAAAA
 GAGGAAAAAGCCAGACAACCCGAGAAGAGGGAGCCAGACCTTGGAGGAGGACAGGGCCAGACACCC
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 CAAGTCAATTTCCGGGAGCCAGCCAGCCCTGGGGCCGAATCTGGACGGCTCTGGCCTCTCCCCAGA
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 GTCCCTTCGGTCCCCGGGAGATCCTGGTGGCGGATGAGCAGAACCGGGCACTGAAACGCTTCTCCCTCA
 CGCGGACTACAAGGGCACCGTCCCGTCCCTGAGGGCTGCTCCCTTGCAGCGTGGCCGCCCTGCAGAGC
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 AGCCGGGGCCTGCGGGCCTGGTGTCTGACCACCAGCCCCAGGGGCATTTCTGGGGTCCGACTGGC
 AGCAGAAAGTGTGGTAATCTGTGATGGGCTGGGCCAGGTGGTGGGGAGTACAAGGGGCCAGGCCCTGCA
 TGGCTGCCAGCCGGGCTCCGTGTCTGTGGATAAGAAGGGCTACATCTTTCTGACCCTTCGAGAAGTCAAC
 AAGGTGGTGTCTGGACCCGAAGGGTCCCTCCTTGGAGACTTCTGACAGCCTACCACGGCCTGGAAA
 AGCCCCGGTTACCACCATGGTGGATGGCAGGTACCTGGTGTCCCTCAGTAACGGGACCATCCACAT
 CTTTCGGGTCCGTTCTCCGGACAGT

ACGCGTACGCGGGCCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC200891 representing NM_030961
 Red=Cloning site Green=Tags(s)

MVSHGSSPSLLEALSSDFLACKICLEQLRAPKTLPLCHTYCQDCLAQLADGGRVRCPECRETVPVPPPEGV
 ASFKTNFFVNGLLDLVKARACGDLRAGKPACALCPLVGGTSTGGPATARCLDCADDLCQACADGHRCTRQ
 THTHRVDLVGYRAGWYDEEARERQAAQCPQHPGEALRFLCQPCSQLLCRECLDPHLDPCLPLAEAVR
 ARRPGLEGLLAGVDNNLVELEAARRVEKEALARLREQAARVGTQVEEAEGVLRALLAQKQEVLGQLRAH
 VEAAEEAARERLAELEGREQVARAAAAFARRVLSLGREAEILSLEGAIQRLRQLQGCPWAPGPAPCLLP
 QLELHPGLLDKNCHLLRLSFEEQQPQKDGKDGAGTQGGEESSQSRREDEPKTERQGGVQPQAGDGAQTPK
 EEKAQTTRREGAQTLEEDRAQTPHEDGGPQPHRGGPNKKKFKGRLKSI SREPSALGPNLDGSGLLPR
 PIFYCSFPTRMPGDKRSPRITGLCPFGPREILVADEQNRALKRFSLNGDYKGTVPVPEGCSPCSVAALQS
 AVAFSASARLYLINPNGEVQWRRALSLSQASHAVAALPSGDRVAVSVAGHVEVYNMEGSLATRFIPGGKA
 SRGLRALVFLTTSPOGHFVGSQWQNSVVICDGLGOVVEYKGPGLHGCQPGSVSVDKKGIFYIFLTLREVN
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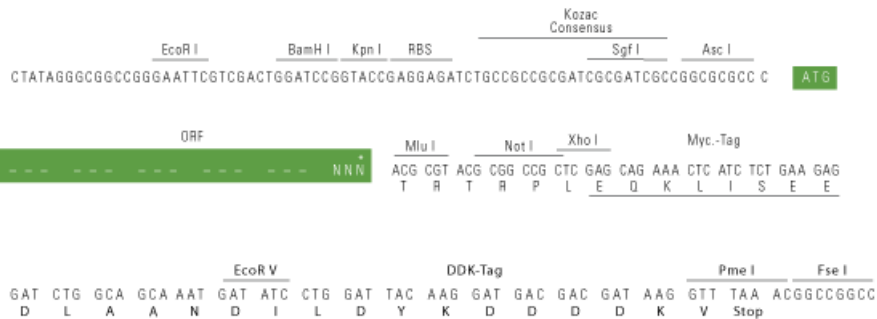
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mg2877_h06.zip

Restriction Sites: AscI-MluI

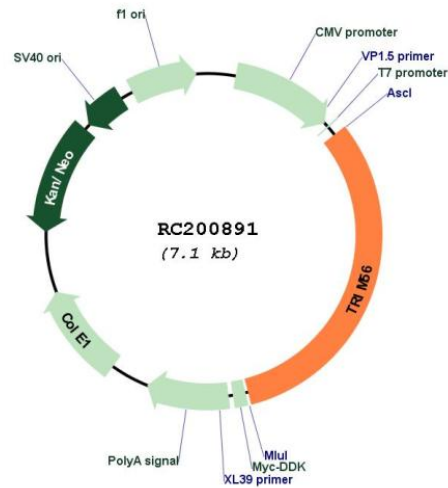
Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

Plasmid Map:



ACCN: NM_030961

ORF Size: 2265 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_030961.3](#)

RefSeq Size: 3547 bp

RefSeq ORF: 2268 bp

Locus ID: 81844

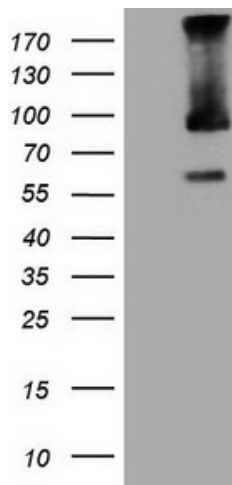
UniProt ID: [Q9BRZ2](#)

Cytogenetics: 7q22.1

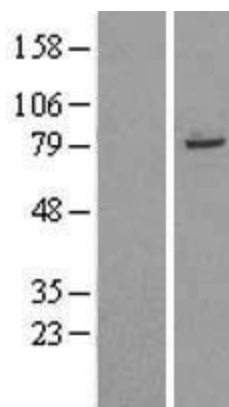
MW: 81.3 kDa

Gene Summary: E3 ubiquitin-protein ligase that plays a key role in innate antiviral immunity (PubMed:21289118). In response to pathogen- and host-derived double-stranded DNA (dsDNA), targets TMEM173/STING to 'Lys-63'-linked ubiquitination, thereby promoting its homodimerization, a step required for the production of type I interferon IFN-beta (By similarity). Independently of its E3 ubiquitin ligase activity, positive regulator of TLR3 signaling. Potentiates extracellular double stranded RNA (dsRNA)-induced expression of IFNB1 and interferon-stimulated genes ISG15, IFIT1/ISG56, CXCL10, OASL and CCL5/RANTES. Promotes establishment of an antiviral state by TLR3 ligand and TLR3-mediated chemokine induction following infection by hepatitis C virus (PubMed:22948160).[UniProtKB/Swiss-Prot Function]

Product images:



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY TRIM56 (Cat# RC200891, 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-TRIM56 (Cat# [TA808895])(1:2000). Positive lysates [LY410625] (100ug) and [LC410625] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY410625]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC200891 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).