

## Product datasheet for **RG200891**

### TRIM56 (NM\_030961) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	TRIM56 (NM_030961) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	TRIM56
Synonyms:	RNF109
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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**ORF Nucleotide Sequence:**

>RG200891 representing NM\_030961  
 Red=Cloning site Blue=ORF Green=Tags(s)

GACGTTGTATACGACTCCTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCCGGCGCGCC

ATGGTTTCCACGGGTCCTCGCCCTCCCTCTGGAGGCCCTGAGCAGCGACTTCTGGCCTGTAATACT  
 GCCTGGAGCAGCTGCGGGCACCCAAGACTGCCTGCCTGCATACCTACTGCCAAGACTGCCTGGCACA  
 GCTGGCGGATGGCGGCCCGCTCCGCTGCCCGAGTGCCGCGAGACAGTGCCTGTGCCGCCGAGGGTGTG  
 GCCTCCTCAAGACCAACTTCTTCGTCATGGGCTGCTGGACCTGGTGAAGGCCCGGGCCTGTGGAGACC  
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 GGCCCGGTGCCTGGACTGTGCCGATGACTTGTGCCAGGCTGTGCCGACGGGCACCGCTGCACCCGCCAG  
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 CAGCTGGAGCTCCATCCTGGGCTCCTGGACAAGAACTGCCACCTTCTTCGGCTGTCTTTGAGGAGCAGC  
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 GGATGAGCCGAAGACTGAGAGACAGGGTGGAGTCCAGCCCAAGCCGGAGATGGAGCCAGACCCAAAA  
 GAGGAAAAAGCCAGACAACCCGAGAAGAGGGAGCCAGACCTTGGAGGAGGACAGGGCCAGACACCC  
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 CGCGGACTACAAGGGCACCGTCCCGTCCCTGAGGGCTGCTCCCTTGCAGCGTGGCCGCCCTGCAGAGC  
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 AAGGTGGTGTCTGGACCCGAAGGGTCCCTCCTTGGAGACTTCTGACAGCCTACCACGGCCTGGAAA  
 AGCCCCGGTTACCACCATGGTGGATGGCAGGTACCTGGTGTGCTCCCTCAGTAACGGGACCATCCACAT  
 CTTTCGGGTCCGTTCTCCGGACAGT

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:** >RG200891 representing NM\_030961  
 Red=Cloning site Green=Tags(s)

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MVSHGSSPSLLEALSSDFLACKICLEQLRAPKTLPLCHTYCQDCLAQLADGGRVRCPECRETVPVPPPEGV
ASFKTNFFVNGLLDLVKARACGDLRAGKPACALCPLVGGTSTGGPATARCLDCADDLCQACADGHRCTRQ
THTHRVDLVGYRAGWYDEEARERQAAQCPQHPGEALRFLCQPCSQLLCRECLDPHLDPCLPLAEAVR
ARRPGLLEGLLAGVDNNLVELEAARRVEKEALARLREQAARVGTQVEEAEGVLRALLAQKQEVLGQLRAH
VEAAEEAARERLAELEGREQVARAAAAFARRVLSLGREAEILSLEGAIQRLRQLQGCPWAPGPAPCLLP
QLELHPGLLDKNCHLLRLSFEEQQPQKDGKDGAGTQGGEESSQSRREDEPKTERQGGVQPQAGDGAQTPK
EEKAQTTREEGAQTLEEDRAQTPHEDGGPQPHRGGRPNKKKKFKGRLKSI SREPSALGPNLDGSGLLPR
PIFYCSFPTRMPGDKRSPRITGLCPFGPREILVADEQNRALKRFSLNGDYKGTVPVPEGCSPCSVAALQS
AVAFSASARLYL INPNGEVQWRRALSLSQASHAVAALPSGDRVAVSVAGHVEVYNMEGSLATRFIPGGKA
SRGLRALVFLTTSPOGHFVGSWQNSVVICDGLGOVVEYKGPGLHGCQPGSVSVDKKGYIFLTLREVN
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```

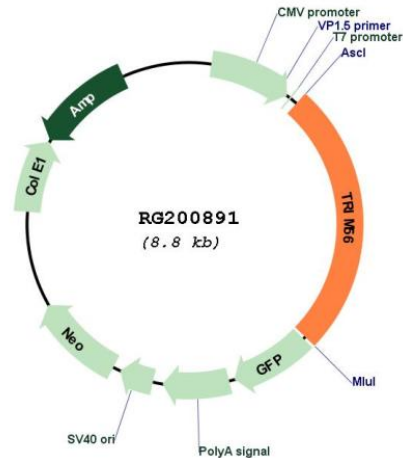
TRTRPLE - GFP Tag - V

**Restriction Sites:** AscI-MluI

**Cloning Scheme:**



## 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\\_030961.1](#), [NP\\_112223.1](#)

RefSeq Size: 3547 bp

RefSeq ORF: 2268 bp

Locus ID: 81844

UniProt ID: [Q9BRZ2](#)

Cytogenetics: 7q22.1

**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]