

# Recombinant Mouse TR138 Protein

**For Research Use Only**

## 1. Basic Product Information

Catalog No.: REP51605

Size: 10ug, 100ug

Protein Name: E3 ubiquitin-protein ligase TRIM38 (EC 2.3.2.27) (E3 SUMO-protein ligase TRIM38) (EC 2.3.2.-) (Tripartite motif-containing protein 38)

Synonym: Trim38

UniProt ID: Q5SZ99

UniProt Link: [www.uniprot.org/uniprotkb/Q5SZ99/entry](http://www.uniprot.org/uniprotkb/Q5SZ99/entry)

Species Source: Mouse

Expression System: HEK293T eukaryotic cell expression system Sequence

Length: 471 AA

Molecular Weight: 54 KD

Protein Tag: C-terminal His6

## 2. Amino Acid Sequence

MGSDFFSTVKIRKVTSCSICKAMMSHPVSINCGHSYCKSCIQSYVCNVSPKTGWKMLGCPLCSSPFSL  
ENLRPNKELETIIDMIKGMEEQDQDMVCEEHEEKFNRFCEDDGQLLCWRCYWEDRHKGHTLAHVK  
DVYQNYKEKLQNTMTKLRELQENHEVQIHFITHQINAWKDAVEDRRQTIKSNFKNLQSFLQEEEFY  
LWRLNEEEKEMLVQLEGSEANLQQTFERAQCQIQELEAKCQGSQAQKLLQDVKNTLSRCEAMKRNP  
LKADPLKVHTKCNVSELYFDVKILRRHQVSVILDPSTAHLDLALTKGGRLVTYKRCPRDLQARSSAK  
RFYGLPCVLGCEGFTSGRYYFEVSVENATSWDLGVCVENVHRGFNMKKEPESGFWTIKMSEEDGL  
EALTSTPTPLHLIEKPQILGVFLDYEAGAVSFYSVTTGSHIFTFPKASFQDTRLRPFQVYQYSPLFLP  
AINNQ

## 3. Buffer Composition

Liquid format: PBS-based buffer containing 50% glycerol. Glycerol concentration can be customized upon customer request; please state special requirements when placing your order.

Lyophilized format: Buffer before lyophilization is PBS supplemented with 6% trehalose.

## 4. Storage Conditions

Upon receipt, store the product at -20 °C or -80 °C. Aliquot the product for on-demand use to preserve protein activity and prevent denaturation and inactivation caused by repeated freeze-thaw cycles.

## 5. Product Description

This product is recombinant E3 ubiquitin-protein ligase TRIM38 (EC 2.3.2.27) (E3 SUMO-protein ligase TRIM38) (EC 2.3.2.-) (Tripartite motif-containing protein 38) produced using the HEK293T eukaryotic cell expression system. It is suitable for in-vitro functional assays, protein-protein interaction studies, antibody preparation and other biomedical research applications.

**Protein Function:** E3 ubiquitin-protein and E3 SUMO-protein ligase that acts as a regulator of innate immunity (PubMed:22539786, PubMed:26392463, PubMed:27637147). Acts as a negative regulator of type I interferon IFN-beta production by catalyzing 'Lys-48'-linked polyubiquitination of AZI2/NAP1, leading to its degradation (PubMed:22539786). Mediates 'Lys-48'-linked polyubiquitination and proteasomal degradation of the critical TLR adapter TICAM1, inhibiting TLR3-mediated type I interferon signaling (PubMed:26392463). Acts as a positive regulator of the cGAS-STING pathway by acting as a E3 SUMO-protein ligase: mediates sumoylation of CGAS and STING, preventing their degradation and thereby activating the innate immune response to DNA virus (PubMed:27637147). Also acts as a negative regulator of NF-kappa-B signaling independently of its E3 protein ligase activity by promoting lysosome-dependent degradation of TAB2 and TAB3 adapters (By similarity).

**Subcellular Localization:** Cytoplasm .

## 6. Notes

- Avoid repeated freeze-thaw cycles to maintain protein stability and biological activity.
- Please specify special buffer-composition requirements at the time of order placement.
- For research use only. Not intended for clinical diagnosis, therapeutic use or commercial manufacturing.