# Recombinant Mouse Complement C1q tumor necrosis factor-related protein 3 (C1qtnf3)

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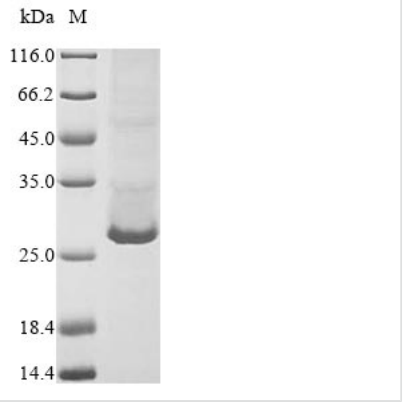
| **Product Code** | CSB-MP875360MO |
| **Abbreviation** | Recombinant Mouse C1qtnf3 protein |
| **Storage** | The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C. |
| **Uniprot No.** | Q9ES30 |
| **Product Type** | Recombinant Protein |
| **Immunogen Species** | Mus musculus (Mouse) |
| **Purity** | Greater than 85% as determined by SDS-PAGE. |
| **Sequence** | QDEYMESPQAGGLPPDCSKCCHGDYGFRGYQGPPGPPGPPGIPGNHGNNG NNGATGHEGAKGEKGDKGDLGPRGERGQHGPKGEKGYPGVPPELQIAFMAS LATHFSNQNSGIIFSSVETNIGNFFDVMTGRFGAPVSGVYFFTFSMMKHEDVE EVYVYLMHNGNTVFSMYSYETKGKSDTSSNHAVLKLAKGDEVWLRMGNGAL HGDHQRFSTFAGFLLFETK |
| **Research Area** | Metabolism |
| **Source** | Mammalian cell |
| **Target Names** | C1qtnf3 |
| **Protein Names** | Collagenous repeat-containing sequence 26 kDa protein Short name:CORS26 Secretory protein CORS26 Ctrp3 |
| **Expression Region** | 23-246aa |
| **Notes** | Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week. |
| **Tag Info** | N-terminal 10xHis-tagged |
| **Mol. Weight** | 26.6 kDa |
| **Protein Length** | Full Length of Mature Protein |
| **Image** | |




(Tris-Glycine gel) Discontinuous SDS-PAGE (reduced) with 5% enrichment gel and 15% separation gel.

## Description

Recombinant Mouse Complement C1q tumor necrosis factor-related protein 3 (C1qtnf3) is produced in a mammalian cell expression system, which appears to ensure proper folding and post-translational modifications. The protein is expressed as a full-length mature protein, spanning amino acids 23 to 246. It features an N-terminal 10xHis-tag for simplified purification. With a purity level exceeding 85% as determined by SDS-PAGE, this protein seems suitable for various research applications.

C1q tumor necrosis factor-related protein 3 (C1qtnf3) belongs to the C1q/TNF superfamily and is known to be involved in numerous biological processes. Research suggests it plays a role in inflammation and immune response regulation. The protein has also drawn interest in metabolic pathway studies. Its involvement in these pathways makes it a significant focus in research areas seeking to understand cellular communication and response mechanisms.

### Potential Applications

Note: The applications listed below are based on what we know about this protein's biological functions, published research, and experience from experts in the field. However, we haven't fully tested all of these applications ourselves yet. We'd recommend running some preliminary tests first to make sure they work for your specific research goals.

### 1. Antibody Development and Validation Studies

This recombinant mouse C1qtnf3 protein can serve as an immunogen for generating polyclonal or monoclonal antibodies specific to C1qtnf3. The N-terminal 10xHis tag makes purification and immobilization easier for antibody screening assays. Since the mammalian expression system appears to ensure proper protein folding and post-translational modifications, it may be crucial for generating antibodies with native epitope recognition. Researchers can use this protein in ELISA, Western blot, and immunoprecipitation experiments to validate antibody specificity and cross-reactivity.

### 2. Protein-Protein Interaction Studies

The His-tagged C1qtnf3 works well in pull-down assays to identify potential binding partners or validate known interactions with other proteins. The 10xHis

tag allows efficient immobilization on nickel-based resins for affinity purification experiments. Researchers can incubate cell lysates or purified proteins with immobilized C1qtnf3 to capture interacting molecules. This is followed by mass spectrometry analysis or Western blotting for identification. Such an approach proves valuable for mapping protein interaction networks involving C1qtnf3 in various cellular contexts.

**3. Biochemical Characterization and Stability Studies**

This recombinant protein provides a standardized reagent for investigating the biochemical properties of mouse C1qtnf3. These properties include thermal stability, pH tolerance, and oligomerization behavior. Researchers can perform dynamic light scattering, circular dichroism spectroscopy, and analytical ultracentrifugation to characterize protein structure and stability under different conditions. The mammalian expression system likely ensures native-like folding, making it suitable for studying structure-function relationships. These studies may provide insights into optimal storage conditions and protein behavior in physiological environments.

**4. Comparative Species Analysis**

The mouse C1qtnf3 protein can be used alongside human or other species orthologs to conduct comparative functional studies and evolutionary analysis. Researchers can examine species-specific differences in protein structure, stability, and potential binding properties through side-by-side biochemical assays. The standardized expression and purification conditions made possible by the His tag ensure consistent protein quality for reliable cross-species comparisons. Studies like these contribute to understanding the evolutionary conservation and divergence of C1qtnf3 function across mammalian species.

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| **Reconstitution** | We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Please reconstitute protein in deionized sterile water to a concentration of 0.1-1.0 mg/mL.We recommend to add 5-50% of glycerol (final concentration) and aliquot for long-term storage at -20°C/-80°C. Our default final concentration of glycerol is 50%. Customers could use it as reference. |
| **Shelf Life** | The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself.<br>Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C. |