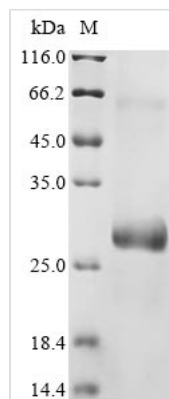




Recombinant Mouse Protein PML (Pml), partial

Product Code	CSB-EP730674MO
Abbreviation	Recombinant Mouse Pml protein, partial
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.	Q60953
Form	Liquid or Lyophilized powder
Storage Buffer	If the delivery form is liquid, the default storage buffer is Tris/PBS-based buffer, 5%-50% glycerol. If the delivery form is lyophilized powder, the buffer before lyophilization is Tris/PBS-based buffer, 6% Trehalose.
Product Type	Recombinant Protein
Immunogen Species	Mus musculus (Mouse)
Purity	Greater than 85% as determined by SDS-PAGE.
Sequence	LRCPSCQAQAKCPKLLPCLHTLCSGCLEAPGLQCPICKAPGQADANGEALDN VFFESLQRRRLAVFRQIVDAQAACTRCKGLADFWCFECEQLICKSKCFEAHQWYL KHEARPLADLRDNSVSSFLDSTRKSNIFCSNTNHRNPALTDIYCRGCAKPLCC TCALLDRNHSHLHCDIGEEIQQWHEE
Research Area	Cancer
Source	E.coli
Target Names	Pml
Expression Region	60-243aa
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 and C-terminal Myc-tagged
Mol. Weight	28.1 kDa
Protein Length	Partial

Image



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



Description

This recombinant mouse protein PML is produced in an E. coli expression system and covers amino acids 60-243. The protein includes an N-terminal 10xHis-tag and a C-terminal Myc-tag, which should make purification and detection more straightforward. It comes with purity greater than 85% based on SDS-PAGE analysis, though this level appears adequate for most research applications. Important to note: this product is strictly for research use and cannot be used for diagnostic or therapeutic purposes.

PML protein plays what seems to be a critical role in cellular processes like apoptosis and senescence. It's involved in forming nuclear bodies, structures that appear essential for various pathways including DNA repair and antiviral defense mechanisms. Given its involvement in these processes, PML has become a significant focus in research areas related to cell cycle regulation and cancer biology.

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. Protein-Protein Interaction Studies

This dual-tagged PML fragment (covering amino acids 60-243) works well in pull-down assays to identify and characterize protein interactions within the central region of mouse PML. The N-terminal His-tag allows for immobilization on nickel-based resins. Meanwhile, the C-terminal Myc-tag provides a way to detect and validate binding partners through Western blot analysis. This particular region may contain important interaction domains that researchers can study separately from the complexity of full-length PML.

2. Antibody Development and Validation

The recombinant PML fragment serves as a practical immunogen or screening antigen when developing antibodies specific to the 60-243aa region of mouse PML. Its dual tagging system makes purification and detection relatively simple during antibody production workflows. Researchers might find this protein useful for generating region-specific antibodies to study PML localization, expression patterns, or modifications in mouse cell lines and tissues.

3. Structural and Biochemical Characterization

This defined PML fragment can be used for biophysical studies aimed at understanding the structural properties of the 60-243aa region. Such studies might include secondary structure analysis, thermal stability testing, and folding characteristics. The high purity (>85%) and dual tags should make purification and handling easier for techniques like circular dichroism spectroscopy, dynamic



light scattering, or analytical ultracentrifugation. These approaches could provide insights into how this specific PML domain is structurally organized.

4. ELISA-Based Quantitative Assays

Both the Myc and His tags open up possibilities for developing sandwich or competitive ELISA formats in quantitative detection applications. The protein can function as a standard or competitor in assays designed to measure PML levels or investigate PML-related pathways in mouse cell extracts or experimental samples. Having dual tags gives researchers some flexibility in how they design assays and choose detection strategies.

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. 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.