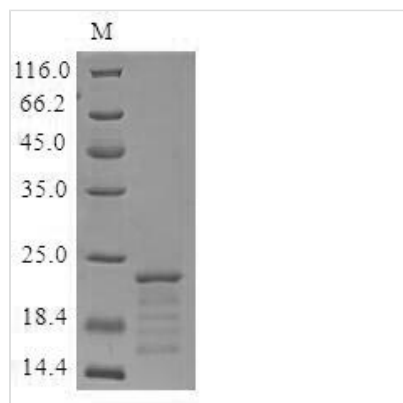




# Recombinant Mouse Myoglobin (Mb)

|                            |   |
|----------------------------|---|
| <b>Product Code</b>        | CSB-MP013529MO  |
| <b>Relevance</b>           | Serves as a reserve supply of oxygen and facilitates the movement of oxygen within muscles.   |
| <b>Storage</b>             | 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. |
| <b>Uniprot No.</b>         | P04247  |
| <b>Product Type</b>        | Recombinant Protein   |
| <b>Immunogen Species</b>   | Mus musculus (Mouse)  |
| <b>Purity</b>              | Greater than 85% as determined by SDS-PAGE.   |
| <b>Sequence</b>            | GLSDGEWQLVLNVWGKVEADLAGHGQEVLIIGLFKTHPETLDKFDKFKNLKSE<br>EDMKGSEDLKKHGCTVLTALGTILKKKGQHA AEIQPLAQSHATKHKIPVKYLEFI<br>SEIIIEVLKKRHSGDFGADAQGAMSKALELFRNDIAAKYKELGFQG   |
| <b>Lead Time</b>           | 3-7 business days   |
| <b>Research Area</b>       | Cancer  |
| <b>Source</b>              | Mammalian cell  |
| <b>Gene Names</b>          | Mb  |
| <b>Protein Names</b>       | Recommended name: Myoglobin   |
| <b>Expression Region</b>   | 2-154aa   |
| <b>Notes</b>               | Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.   |
| <b>Tag Info</b>            | N-terminal 10xHis-tagged and C-terminal Myc-tagged  |
| <b>Mol. Weight</b>         | 21.9 kDa  |
| <b>Protein Description</b> | Full Length of Mature Protein   |

## Image



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



## Description

The region for expressing recombinant Mouse Mb (Myoglobin) contains amino acids 2-154. This Mb (Myoglobin) protein is theoretically predicted to have a molecular weight of 21.9 kDa. This Mb (Myoglobin) recombinant protein is manufactured in mammalian cell. The N-terminal 10xHis tag and C-terminal Myc tag was fused into the coding gene segment of Mb (Myoglobin), making it easier to detect and purify the Mb (Myoglobin) recombinant protein in the later stages of expression and purification.

Mouse myoglobin (Mb) is a globular protein encoded by the Mb gene. Like its human counterpart, mouse myoglobin is primarily expressed in muscle tissues, where it plays a crucial role in oxygen storage and transport. Myoglobin is a heme-containing protein, with a single heme group per molecule that binds oxygen, allowing for its storage and release within muscle cells. This facilitates efficient oxygen supply to working muscles during periods of increased activity. Myoglobin is an essential component of the oxygen homeostasis machinery in muscle tissues. Research on mouse myoglobin helps to understand its role in oxygen metabolism, muscle function, and its implications in various physiological processes.

## 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.