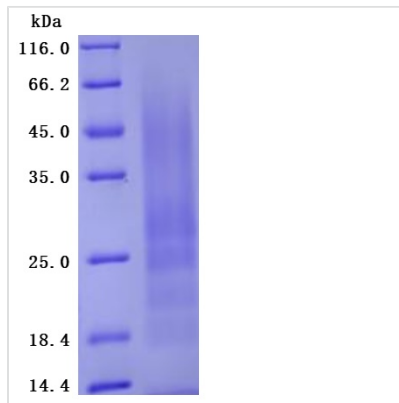


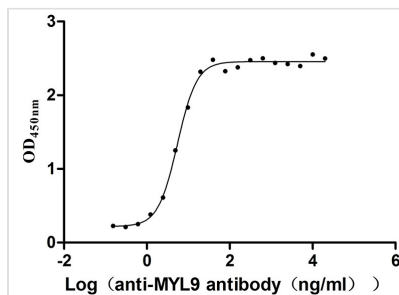


# Recombinant Human Myosin regulatory light polypeptide 9 (MYL9) (Active)

|                            |                                                                                                                                                                                                                                                                                 |
|----------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Product Code</b>        | CSB-YP015318HU                                                                                                                                                                                                                                                                  |
| <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>         | P24844                                                                                                                                                                                                                                                                          |
| <b>Form</b>                | Lyophilized powder                                                                                                                                                                                                                                                              |
| <b>Storage Buffer</b>      | Lyophilized from a 0.2 µm filtered 20 mM Tris-HCl, 0.5 M NaCl, 6% Trehalose, pH 8.0                                                                                                                                                                                             |
| <b>Product Type</b>        | Recombinant Protein                                                                                                                                                                                                                                                             |
| <b>Immunogen Species</b>   | Homo sapiens (Human)                                                                                                                                                                                                                                                            |
| <b>Biological Activity</b> | Measured by its binding ability in a functional ELISA. Immobilized Human MYL9 at 2 µg/mL can bind Anti-MYL9 recombinant antibody (CSB-RA015318MA1HU), the EC50 is 4.628-6.430 ng/mL.                                                                                            |
| <b>Purity</b>              | Greater than 95% as determined by SDS-PAGE.                                                                                                                                                                                                                                     |
| <b>Sequence</b>            | SSKRAKAKTTKKRPQRATSNVFMFDQSQIQEFKEAFNMIDQNRDGFIDKEDL<br>HDMLASLGKNPTDEYLEGMMSEAPGPINFMTFLTMTFGEKLNLTDPEDVIRNAF<br>ACFDEEASGFIHEDHLRELLTTMGDRFTDEEVDEMYREAPIDKKGNFNVEFT<br>RILKHGAKDKDD                                                                                          |
| <b>Lead Time</b>           | 3-7 business days                                                                                                                                                                                                                                                               |
| <b>Source</b>              | Yeast                                                                                                                                                                                                                                                                           |
| <b>Gene Names</b>          | MYL9                                                                                                                                                                                                                                                                            |
| <b>Expression Region</b>   | 2-172aa                                                                                                                                                                                                                                                                         |
| <b>Notes</b>               | Repeated freezing and thawing is not recommended. Store working aliquots at 4? for up to one week.                                                                                                                                                                              |
| <b>Tag Info</b>            | C-terminal 10xHis-tagged                                                                                                                                                                                                                                                        |
| <b>Mol. Weight</b>         | 21.7kDa                                                                                                                                                                                                                                                                         |
| <b>Protein Description</b> | Full Length of Mature Protein                                                                                                                                                                                                                                                   |
| <b>Image</b>               |                                                                                                                                                                                                                                                                                 |



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



**Activity**  
Measured by its binding ability in a functional ELISA. Immobilized Human MYL9 at 2μg/mL can bind Anti-MYL9 recombinant antibody (CSB-RA015318MA1HU)?the EC<sub>50</sub> is 4.628-6.430 ng/mL.

## Description

The recombinant human MYL9 protein is generated in a yeast expression system. Through the integration of the human MYL9 gene fragment (2-172aa) linked to a C-terminal 10xHis-tag gene into a plasmid vector, the construct is introduced into mammalian cells. Subsequent cell culture facilitates effective protein synthesis. The protein's purity, exceeding 95%, is validated via SDS-PAGE analysis, and its endotoxin levels, below 1.0 EU/ug, are confirmed using the LAL method. The protein's functionality is demonstrated by its interaction with MYL9 recombinant antibody (CSB-RA015318MA1HU), with the EC<sub>50</sub> of 4.628-6.430 ng/mL.

MYL9 is a regulatory light chain of myosin, playing a crucial role in various biological processes such as cell contraction, proliferation, and invasion. The MYL9 gene exhibits abnormal expression in various malignancies, including lung cancer, breast cancer, prostate cancer, malignant melanoma, and other tumor types. Moreover, this altered expression is often closely associated with poor prognosis. Serving as both a molecular marker and a potential target, MYL9 holds significant clinical value in early diagnosis, prognosis prediction, and targeted therapy of malignant tumors. Therefore, the preparation of MYL9 protein could facilitate the development and research of clinical drugs targeting MYL9.

## Endotoxin

Less than 1.0 EU/ug as determined by LAL method.

## 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~-80°. Our default final concentration of glycerol is 50%. Customers could use it as reference.