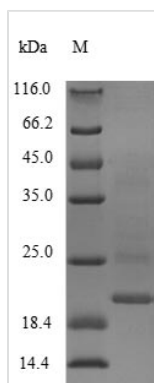




# Recombinant Rat Calmodulin-1 (Calm1)

|                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|--------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Product Code</b>      | CSB-EP004445RAb1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Relevance</b>         | Calmodulin mediates the control of a large number of enzymes, ion channels, aquaporins and other proteins through calcium-binding. Among the enzymes to be stimulated by the calmodulin-calcium complex are a number of protein kinases and phosphatases. Together with CCP110 and centrin, is involved in a genetic pathway that regulates the centrosome cycle and progression through cytokinesis. Mediates calcium-dependent inactivation of CACNA1C. Positively regulates calcium-activated potassium channel activity of KCNN2. |
| <b>Abbreviation</b>      | Recombinant Rat Calm1 protein                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <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>       | P0DP29                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Product Type</b>      | Recombinant Protein                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Immunogen Species</b> | Rattus norvegicus (Rat)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Purity</b>            | Greater than 90% as determined by SDS-PAGE.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Sequence</b>          | ADQLTEEQIAEFKEAFSLFDKDGDTITTKELGTVMRSLGQNPTEAELQDMINE<br>VDADGNGTIDFPEFLTMMARKMKDTSSEEEIREAFRVFDKDGNGYISAAELRH<br>VMTNLGEKLTDEEVDEMIREADIDGDGQVNYEEFVQMMTAK                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Research Area</b>     | Signal Transduction                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Source</b>            | E.coli                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Target Names</b>      | Calm1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Protein Names</b>     | Calm, Cam, Cam1, CaMl                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Expression Region</b> | 2-149aa                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <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>       | 21.7 kDa                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Protein Length</b>    | Full Length of Mature Protein                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Image</b>             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |



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

## 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.