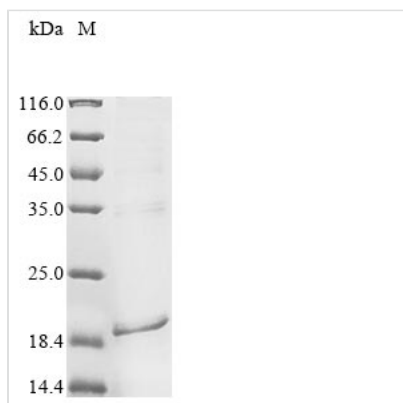




Recombinant Rat Parathyroid hormone (Pth)

| | |
|--------------------------|---|
| Product Code | CSB-EP018987RA |
| Abbreviation | Recombinant Rat Pth 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. | P04089 |
| 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 | Rattus norvegicus (Rat) |
| Purity | Greater than 85% as determined by SDS-PAGE. |
| Sequence | AVSEIQLMHNLGKHLASVERMQWLRKKLQDVHNFVSLGVQMAAREGSYQRP TKKEENVLVDGNSKSLGEGDKADVDVLVKAQSQ |
| Research Area | Signal Transduction |
| Source | E.coli |
| Target Names | Pth |
| Expression Region | 32-115aa |
| 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 | 16.9 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

The expression region of this recombinant Rat Pth covers amino acids 32-115. The calculated molecular weight for this Pth protein is 16.9 kDa. This Pth protein is produced using e.coli expression system. The Pth gene fragment has been modified by fusing the N-terminal 10xHis tag and C-terminal Myc tag, providing convenience in detecting and purifying the recombinant Pth protein during the following stages.

The rat parathyroid hormone (Pth), produced and released by the parathyroid glands, is a key regulator of calcium and phosphorus homeostasis in the body. Pth acts to increase serum calcium by stimulating the release of calcium from bone, enhancing the reabsorption of calcium in the kidneys, and promoting the activation of vitamin D, which increases intestinal calcium absorption. Pth exerts its effects on bone by stimulating osteoclast activity, leading to the breakdown of bone tissue and the release of calcium into the bloodstream. Pth enhances the reabsorption of calcium in the kidneys while promoting the excretion of phosphate, contributing to the regulation of serum calcium and phosphate concentrations. Understanding the role of rat Pth is essential for grasping the intricacies of mineral metabolism and bone health regulation.

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.