

# Rat Sclerostin / SOST Protein (His Tag)

Catalog Number: 80009-R08H



**Sino Biological Inc.**  
Biological Solution Specialist

## General Information

### Gene Name Synonym:

CDD; SOST1; VBCH; 5430411E23Rik

### Protein Construction:

A DNA sequence encoding the rat SOST (NP\_085073.1) (Met 1-Tyr 213) was expressed, fused with a polyhistidine tag at the C-terminus.

**Source:** Rat

**Expression Host:** Human Cells

## QC Testing

**Purity:** > 97 % as determined by SDS-PAGE

### Endotoxin:

< 1.0 EU per µg of the protein as determined by the LAL method

### Stability:

Samples are stable for up to twelve months from date of receipt at -70 °C

**Predicted N terminal:** Gln 24

### Molecular Mass:

The recombinant rat SOST comprises 201 amino acids and predicts a molecular mass of 23 kDa. The apparent molecular mass of the rat SOST is approximately 33 kDa in SDS-PAGE under reducing conditions due to glycosylation.

### Formulation:

Lyophilized from sterile PBS, pH 7.4

Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA. Please contact us for any concerns or special requirements.

## Usage Guide

### Storage:

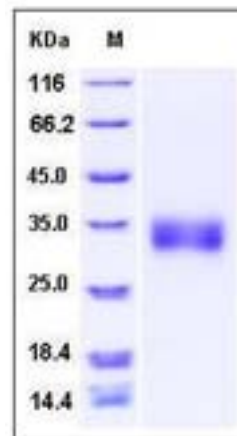
Store it under sterile conditions at -20°C to -80°C upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

**Avoid repeated freeze-thaw cycles.**

### Reconstitution:

Detailed reconstitution instructions are sent along with the products.

## SDS-PAGE:



## Protein Description

Sclerostin, the protein product of the SOST gene, is a potent inhibitor of bone formation. Sclerostin protein is widely expressed at low levels with highest levels in bone, cartilage, kidney, liver, bone marrow and primary osteoblasts differentiated for 21 days, and was originally identified as an important regulator of bone remodeling, homeostasis, and links bone resorption and bone apposition. Recent studies have revealed that Sclerostin protein inhibits the bone growth probably by binding to the extracellular domain of the Wnt coreceptors LRP5 and LRP6 and disrupting Wnt-induced Frizzled-LRP complex formation.

## References

1. Bellido T. (2006) Downregulation of SOST/sclerostin by PTH: a novel mechanism of hormonal control of bone formation mediated by osteocytes. J Musculoskelet Neuronal Interact. 6(4): 358-9.
2. van Bezooijen RL, et al. (2007) SOST expression is restricted to the great arteries during embryonic and neonatal cardiovascular development. Dev Dyn. 236(2): 606-12.

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Fax :+86-10-51029969 • Tel:+86-400-890-9989 • <http://www.sinobiological.com>