Rat Sclerostin / SOST Protein (His Tag)

Catalog Number: **80009-R08H**

General Information

Gene Name Synonym:

SOST

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: HEK293 Cells

QC Testing

Purity: > 97 % as determined by SDS-PAGE

Bio-activity:

Measured by its ability to inhibit Wnt3a induced alkaline phosphatase production by C3H10 T1/2 cells. The ED_{50} for this effect is typically 0.1-0.5 μg/mL.

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 ℃

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:

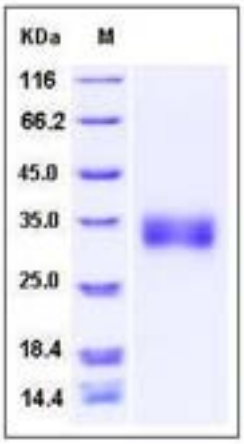
Store it under sterile conditions at -20℃ to -80℃ upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

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 osteeoblasts 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.