

Recombinant mouse SOST/Sclerostin protein

Catalog Number: ATGP3975

PRODUCT INFORMATION

Expression system

HEK293

Domain

24-211aa

UniProt No.

Q99P68

NCBI Accession No.

NP_077769.4

Alternative Names

SOST, Sclerostin, 5430411E23Rik

PRODUCT SPECIFICATION

Molecular Weight

21.9kDa (194aa)

Concentration

0.25mg/ml (determined by Absorbance at 280nm)

Formulation

Liquid. In Phosphate-Buffered Saline (pH 7.4) containing 10% glycerol

Purity

> 90% by SDS - PAGE

Endotoxin level

< 1 EU per 1ug of protein (determined by LAL method)

Tag

His-Tag

Application

SDS-PAGE

Storage Condition

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

BACKGROUND

Description

SOST, also known as Sclerostin, is a member of the cerberus/DAN family. This protein is produced primarily by the osteocyte but is also expressed in other tissues, and has anti-anabolic effects on bone formation. It was originally believed to be a nonclassical bone morphogenetic protein (BMP) antagonist. More recently, sclerostin has been identified as binding to LRP5/6 receptors and inhibiting the Wnt signaling pathway. The inhibition of the

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Wnt pathway leads to decreased bone formation. Although the underlying mechanisms are unclear, it is believed that the antagonism of BMP-induced bone formation by sclerostin is mediated by Wnt signaling, but not BMP signaling pathways. Mutations in the gene that encodes the sclerostin protein are associated with disorders associated with high bone mass, sclerosteosis and van Buchem disease. Recombinant mouse SOST/Sclerostin, fused to His-tag at C-terminus, was expressed in HEK293 cell and purified by using conventional chromatography techniques.

Amino acid Sequence

QGWQAFRND A TEVIPGLGEY PEPPENNQT MNRAENGGRP PPHPYDAKDV SEYSCRELHY TRFLTDGPCR SAKPVTELCV
SGQCGPARLL PNAIGRVKWW RPNGPDFRCI PDRYRAQRVQ LLCPGGAAPR SRKVRLVASC KCKRLTRFHN QSELKDFGPE
TARPQKGRKP RPGARGAKAN QAELENAY<HH HHHH>

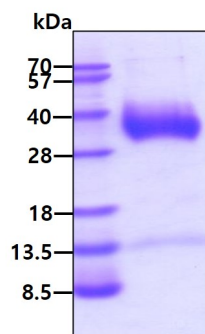
General References

Winkler DG, et al. (2003) The EMBO Journal. 22:6267-6276.

Li X, et al. (2005) The Journal of Biological Chemistry. 280:19883-19887.

DATA

SDS-PAGE



3 μ g by SDS-PAGE under reducing condition and visualized by coomassie blue stain