

Recombinant human SOST/Sclerostin protein

Catalog Number: ATGP4011

PRODUCT INFORMATION

Expression system

HEK293

Domain

24-213aa

UniProt No.

Q9BQB4

NCBI Accession No.

NP_079513.1

Alternative Names

SOST, Sclerostin, UNQ2976, PRO7455, PRO7476, CDD, VBCH, DAND6, SOST1

PRODUCT SPECIFICATION

Molecular Weight

22.7kDa (200aa)

Concentration

0.25mg/ml (determined by Bradford assay)

Formulation

Liquid. In Phosphate-Buffered Saline (pH 7.4) containing 30% glycerol

Purity

> 95% 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 human SOST/Sclerostin, fused to His-tag at C-terminus, was expressed in HEK293 cell and purified by using conventional chromatography techniques.

Amino acid Sequence

<DGSM>QGWFQAF KNDATLIIPE LGEYPEPPPE LENNKTMNRA ENGRPPHHP FETKDVSEYS CRELHFTRYV
TDGPCRSAPK VTELVCSGQC GPARLLPNAI GRGKWWRPSPG PDFRCIPDRY RAQRVQLLCP GGEAPRARKV RLVASCKCKR
LTRFHNQSEL KDFGTEAARP QKGRKPRPRA RSKANQAEL ENAY<HHHHHH>

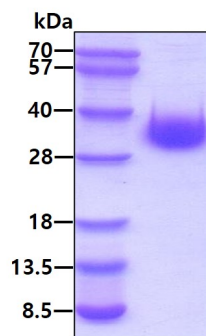
General References

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