Datasheet for ABIN2181783

Sclerostin Protein (SOST) (AA 24-213) (His tag,Biotin)

2 Images

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Overview

Quantity:	200 µg
Target:	Sclerostin (SOST)
Protein Characteristics:	AA 24-213
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This Sclerostin protein is labelled with His tag,Biotin.

Product Details

Brand:	MABSol®,UltraLys
Sequence:	AA 24-213
Specificity:	The primary amines in the side chains of lysine residues and the N-terminus of the protein are conjugated with biotins using standard chemical labeling method. A standard biotin reagent (13.5 angstroms) is used in this product.
Characteristics:	This protein carries a polyhistidine tag at the N-terminus. The protein has a calculated MW of 22.5 kDa. The protein migrates as 25-36 kDa on a SDS-PAGE gel under reducing (R) condition due to different glycosylation.
Purity:	>95 % as determined by reduced SDS-PAGE.
Sterility:	0.22 µm filtered
Endotoxin Level:	Less than 1.0 EU per µg by the LAL method.

Target Details

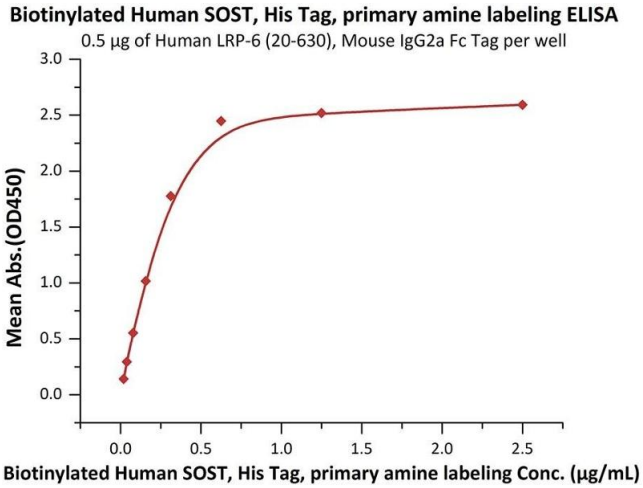
Target:	Sclerostin (SOST)
Alternative Name:	SOST (SOST Products)
Background:	Sclerostin (SOST) also known as Sclerosteosis, VBCH, is a secreted glycoprotein with a signal peptide for secretion and a C-terminal cysteine knot-like (CTCK) domain and belongs to the Cerberus/DAN family of bone morphogenetic protein (BMP) antagonists. Sclerostin is produced by the osteocyte and has anti-anabolic effects on bone formation. More recently Sclerostin has been identified as binding to LRP5/6 receptors and inhibiting the Wnt signalling pathway. Wnt pathway inhibition under these circumstances is antagonistic to bone formation (meaning Sclerostin antagonizes bone formation). It has been shown that SOST binds BMP-5, -6, and -7 with high affinity and BMP-2 and -4 with low affinity. Sclerostin production by osteocytes is inhibited by parathyroid hormone, mechanical loading and cytokines including oncostatin M, cardiotrophin-1 and leukemia inhibitory factor. Sclerostin production is increased by calcitonin. Thus, osteoblast activity is self regulated by a negative feedback system. Mutations of Sclerostin is associated with the syndrome Sclerosteosis, and reduced sclerostin expression results in a milder form of the disorder called van Buchem disease.
Molecular Weight:	22.3 kDa

Application Details

Comment:	A chemically labeled biotinylated protein with ultra sensitivity. The product is produced using a chemical labeling approach. The primary amines in the side chains of lysine residues and the N-terminus of protein are conjugated with biotins. Chemical labeling usually results in multiple biotin attachment on a single protein molecule, which could potentially lead to higher detection sensitivity.
Restrictions:	For Research Use only

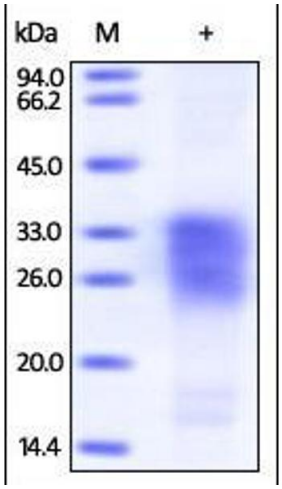
Handling

Format:	Lyophilized
Buffer:	PBS, pH 7.4
Handling Advice:	Please avoid repeated freeze-thaw cycles.
Storage:	-20 °C
Storage Comment:	No activity loss was observed after storage at: In lyophilized state for 1 year (4 °C), After reconstitution under sterile conditions for 3 months (-70 °C).



ELISA

Image 1. Immobilized Human LRP-6 (20-630), Mouse IgG2a Fc Tag (ABIN6923175,ABIN6938849) at 5 μg/mL (100 μL/well) can bind Biotinylated Human SOST, His Tag, primary amine labeling (ABIN2181784,ABIN2181783) with a linear range of 0.01-0.313 μg/mL (QC tested).



SDS-PAGE

Image 2. Biotinylated Human SOST on SDS-PAGE under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 95%.