

Human CellExp<sup>™</sup> Sclerostin, human recombinant SOST, VBCH Catalog # PBV11625r

## **Specification**

## Human CellExp<sup>™</sup> Sclerostin, human recombinant - Product info

Primary Accession Calculated MW

<u>Q9BQB4</u> 22.5 kDa KDa

## Human CellExp<sup>™</sup> Sclerostin, human recombinant - Additional Info

Gene ID Other Names SOST, VBCH

Gene Source Source Assay&Purity Recombinant Target/Specificity SOST 50964

Human HEK 293 cells SDS-PAGE;> 95% Yes

**Application Notes** Reconstitute in sterile deionized water to the desired protein concentration.

**Format** Lyophilized

Storage

-20°C;Lyophilized from 0.22  $\mu$ m filtered solution in PBS, pH7.4. Normally Trehalose is added as protectant before lyophilization.

## Human CellExp<sup>™</sup> Sclerostin, human recombinant - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

Human CellExp<sup>™</sup> Sclerostin, human recombinant - Images

Human CellExp<sup>™</sup> Sclerostin, human recombinant - Background



Sclerostin (SOST) is 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.