

Recombinant Mouse Sclerostin/SOST Protein (His Tag)

Catalog No. PKSM041137

Note: Centrifuge before opening to ensure complete recovery of vial contents.

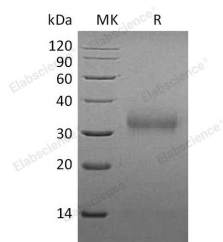
Description

| | |
|------------------------------------|----------------------------|
| Synonyms | Sclerostin;Sost |
| Species | Mouse |
| Expression Host | HEK293 Cells |
| Sequence | Gln24-Tyr211 |
| Accession | Q99P68 |
| Calculated Molecular Weight | 21.9 kDa |
| Observed molecular weight | 32 kDa |
| Tag | C-His |
| Bioactivity | Not validated for activity |

Properties

| | |
|-----------------------|---|
| Purity | > 95 % as determined by reducing SDS-PAGE. |
| Endotoxin | < 1.0 EU per µg of the protein as determined by the LAL method. |
| Storage | Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months. |
| Shipping | This product is provided as lyophilized powder which is shipped with ice packs. |
| Formulation | Lyophilized from a 0.2 µm filtered solution of PBS, pH 7.4. Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual. |
| Reconstitution | Please refer to the printed manual for detailed information. |

Data



> 95 % as determined by reducing SDS-PAGE.

Background

Sclerostin (SOST) is a member of the cerberus/DAN family, a group of secreted glycoproteins characterized by a cysteine-knot motif. Cerberus/DAN family members are putative BMP antagonists, and include Dan, Cerberus, Gremlin, PRDC,

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and Caronte. While the overall sequence identity between members of the family is low, they have conserved spacing of six cysteine residues. Cerberus and Dan have an additional cysteine residue used for dimerization? however, SOST does not and is secreted as a monomer. SOST was originally identified as an important regulator of bone homeostasis. SOST is expressed by osteoclasts in developing bones of mouse embryos, including both intramembranously forming skull bones and endochondrally forming long bones. SOST plays a physiological role as a negative regulator of bone formation by repressing BMP-induced osteogenesis. SOST has been shown to have unique ligand specificity, binding BMP-5, -6, and -7 with high affinity and BMP-2 and -4 with low affinity.