

SOST Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP6261A

Product Information

Application IHC-P-Leica, WB, E

Primary Accession Q9BQB4
Other Accession Q9BG79

Reactivity Human, Rat, Mouse

Predicted Bovine
Host Rabbit
Clonality Polyclonal
Isotype Rabbit IgG
Calculated MW 24031
Antigen Region 12-42

Additional Information

Gene ID 50964

Other Names Sclerostin, SOST

Target/Specificity This SOST antibody is generated from rabbits immunized with a KLH

conjugated synthetic peptide between 12-42 amino acids from the N-terminal

region of human SOST.

Dilution IHC-P-Leica~~1:500 WB~~1:1000 E~~Use at an assay dependent

concentration.

Format Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide.

This antibody is purified through a protein A column, followed by peptide

affinity purification.

Storage Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store

at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions SOST Antibody (N-term) is for research use only and not for use in diagnostic

or therapeutic procedures.

Protein Information

Name SOST (HGNC:13771)

Function Negative regulator of bone growth that acts through inhibition of Wnt

signaling and bone formation.

Cellular Location Se

Secreted, extracellular space, extracellular matrix

Tissue Location

Widely expressed at low levels with highest levels in bone, cartilage, kidney, liver, bone marrow and primary osteoblasts differentiated for 21 days. Detected in the subendothelial layer of the aortic intima (at protein level).

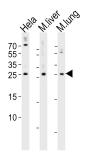
Background

Sclerostin is a secreted glycoprotein with a C-terminal cysteine knot-like (CTCK) domain and sequence similarity to the DAN (differential screening-selected gene aberrative in neuroblastoma) family of bone morphogenetic protein (BMP) antagonists. Loss-of-function mutations in this gene are associated with an autosomal-recessive disorder, sclerosteosis, which causes progressive bone overgrowth. A deletion downstream of this gene, which causes reduced sclerostin expression, is associated with a milder form of the disorder called van Buchem disease.

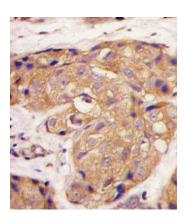
References

Semenov, M.V., J. Biol. Chem. 281 (50), 38276-38284 (2006) Ellies, D.L., J. Bone Miner. Res. 21 (11), 1738-1749 (2006) Balemans, W., J Musculoskelet Neuronal Interact 6 (4), 355-356 (2006) Gardner, J.C., J. Clin. Endocrinol. Metab. 90 (12), 6392-6395 (2005)

Images



Western blot analysis of lysates from Hela cell line, mouse liver, mouse lung tissue lysate (from left to right), using SOST Antibody (N-term)(Cat. #AP6261a). AP6261a was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L(HRP) at 1:10000 dilution was used as the secondary antibody. Lysates at 20ug per lane.



Formalin-fixed and paraffin-embedded human breast carcinoma tissue reacted with SOST antibody (N-term)(Cat.#AP6261a), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.

Citations

- Computational and functional characterization of four SNPs in the SOST locus associated with osteoporosis.
- Co-expression of DKK-1 and Sclerostin in Subchondral Bone of the Proximal Femoral Heads from Osteoarthritic Hips.
- Single-pulsed electromagnetic field therapy increases osteogenic differentiation through Wnt signaling pathway and sclerostin downregulation.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.