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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	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).

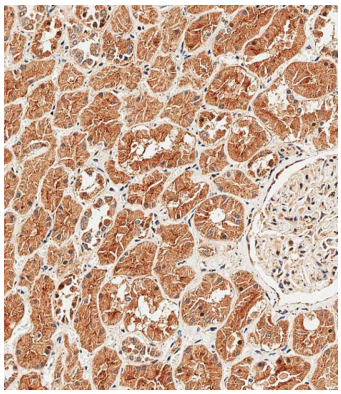
Background

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.

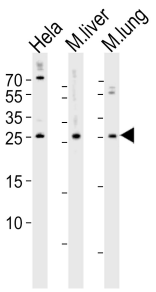
References

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

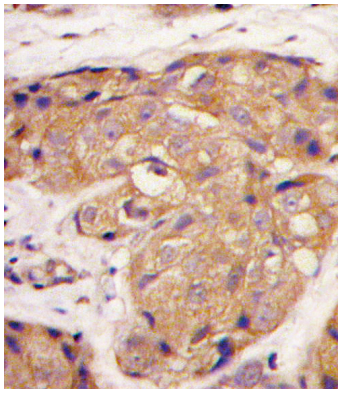


Immunohistochemical analysis of paraffin-embedded Human kidney tissue using AP6261A performed on the Leica® BOND RXm. Tissue was fixed with formaldehyde at room temperature, antigen retrieval was by heat mediation with a EDTA buffer (pH9. 0). Samples were incubated with primary antibody(1:500) for 1 hours at room temperature. A undiluted biotinylated CRF Anti-Polyvalent HRP Polymer antibody was used as the secondary antibody.



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'.