## bs-10200R

- DATASHEET -

# [ Primary Antibody ]

# Sclerostin Rabbit pAb



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Applications: WB (1:500-2000) IHC-P (1:100-500) IHC-F (1:100-500) IF (1:100-500)

Reactivity: Human, Rat (predicted: Mouse, Rabbit, Pig, Sheep, Cow, Dog, Horse)

Predicted MW.:<sup>21 kDa</sup>

Subcellular Location: Cytoplasm

GeneID: 50964

Host: Rabbit

Clonality: Polyclonal

SWISS: Q9BQB4

Target: Sclerostin

Immunogen: KLH conjugated synthetic peptide derived from human Sclerostin: 121-180/213.

Isotype: IgG

Purification: affinity purified by Protein A

#### Concentration: 1mg/ml

Storage: 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol. Shipped at 4°C. Store at -20°C for one year. Avoid repeated freeze/thaw cycles.

**Background:** Negative regulator of bone growth.Sclerostin (SOST) is a bone morphogenetic protein (BMP) antagonist, leading to the activation of BMP signaling. It negatively regulates the formation of bone by repressing the differentiation and/or function of osteoblasts induced by BMPs. It has been shown that Sclerostin binds BMP-5, -6, and -7 with high affinity and BMP-2 and -4 with low affinity. The noggin-sclerostin protein complex represents a novel mechanism for the fine-tuning of BMP activity in bone homeostasis. Evidence is accumulating that one of the important mechanisms of bone regulation by sclerostin is the modulation of Wnt/Beta-catenin signaling. Sclerostin also rapidly activated ERK-1/2 MAPK signaling, indicating the involvement of additional signaling pathways

### – VALIDATION IMAGES



Sample: Cartilage(Rat) Lysate at 40 ug Primary: Anti-Sclerostin (bs-10200R) at 1/1000 dilution Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution Predicted band size: 21 kD Observed band size: 21 kD



Tissue/cell: human laryngocarcinoma; 4% Paraformaldehyde-fixed and paraffinembedded; Antigen retrieval: citrate buffer ( 0.01M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37°C for 20 min; Incubation: Anti-Sclerostin Polyclonal Antibody, Unconjugated(bs-10200R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining



Paraformaldehyde-fixed, paraffin embedded (Human kidney); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (Sclerostin) Polyclonal Antibody, Unconjugated (bs-10200R) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructionsand DAB staining.

## - SELECTED CITATIONS -

- [IF=16.6] Chen Shengqiang. et al. Local H2 release remodels senescence microenvironment for improved repair of injured bone. NAT COMMUN. 2023 Nov;14(1):1-16 IF ;MOUSE. 38012166
- [IF=9.4] Wyonna Darleen Rindt. et al. A 3D bioreactor model to study osteocyte differentiation and mechanobiology under perfusion and compressive mechanical loading. ACTA BIOMATER. 2024 Aug;184:210 IF ;Mouse. 38969078

- [IF=8.728] Yoo-Sung Nam. et al. Sclerostin in Periodontal Ligament: Homeostatic Regulator in Biophysical Force-Induced Tooth Movement. J CLIN PERIODONTOL. 2022 Apr 03 IF ;Rat. 35373367
- [IF=8.213] Yiqi Yanget al. Bioprinting of an osteocyte network for biomimetic mineralization. Biofabrication . 2020 Jul 29;12(4):045013. ICC ;mouse. 32610301
- [IF=6.1] Weiyi Zhang. et al. A novel antimycin analogue antimycin A2c, derived from marine Streptomyces sp., suppresses HeLa cells via disrupting mitochondrial function and depleting HPV oncoproteins E6/E7. LIFE SCI. 2023 Oct;330:121998 WB ;Human. 37536615