bs-6401R **[Primary Antibody]**

BMP1 Rabbit pAb

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DATASHEET

Host: Rabbit **Isotype:** IgG

Clonality: Polyclonal

GeneID: 649 **SWISS:** P13497

Target: BMP1

Immunogen: KLH conjugated synthetic peptide derived from human BMP1: 901-986/986.

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: Bone morphogenetic protein 1 (BMP1) was first identified in osteogenic extracts of bone. It is an extracellular zinc endopeptidase, implicated in morphogenetic processes in a broad range of species. BMP1 is a member of the astacin family of metalloproteinases. The astacin family includes BMP1, astacin, meprin A and B, tolloid-like proteins, and choriolysin. BMP1 is involved in extracellular matrix (ECM) formation, suggesting that a functional link may exist between astacin metalloproteinases, growth factors, and cell differentiation and pattern formation during development. The name PCP reflects this enzyme's involvement in the collagen deposition of growing bone. The enzymes known as the procollagen C and N proteinases (PCP and PNP) are involved in the processing of fibrillar procollagen precursors to mature collagens, which is an essential requirement for fibril formation. PCP cleaves the C-terminus from procollagen, to allow the formation of mature, triplehelical collagen. The N-terminus is cleaved by the procollagen N-proteinase (PNP or ADAM-TS2). Defects in PNP have been linked to the skin disorder dermatosparaxis, and defects in BMP1 are thought to lead to aberrant collagen processing, and connective tissue disorders. Many forms of BMP1 have been reported, with varying truncation at the C-terminus. The long form of BMP1 is most similar to the tolloid-like proteins, which have extra EGF-like and CUB domains.

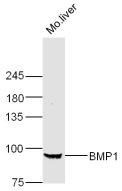
Applications: **WB** (1:500-2000)
IHC-P (1:100-500)
IHC-F (1:100-500)
IF (1:100-500)

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

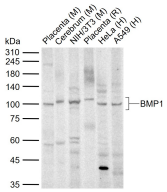
Predicted MW.: 98 kDa

Subcellular Location: Secreted ,Extracellular matrix ,Cytoplasm

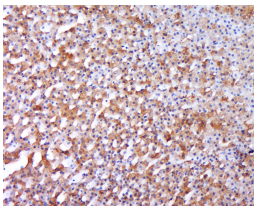
VALIDATION IMAGES



Sample: Liver (Mouse) Lysate at 40 ug Primary: Anti-BMP1 (bs-6401R) at 1/300 dilution Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution Predicted band size: 98 kD Observed band size: 98 kD



Sample: Lane 1: Mouse Placenta tissue lysates Lane 2: Mouse Cerebrum tissue lysates Lane 3: Mouse NIH/3T3 cell lysates Lane 4: Rat Placenta tissue lysates Lane 5: Human HeLa cell lysates Lane 6: Human A549 cell lysates Primary: Anti-BMP1 (bs-6401R) at 1/1000 dilution Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution Predicted band size: 98 kDa Observed band size: 100 kDa



Tissue/cell: Rat adrenal gland; 4% Paraformaldehyde-fixed and paraffin-embedded; 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-BMP1 Polyclonal Antibody, Unconjugated(bs-6401R) 1:500, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining

SELECTED CITATIONS

- **[IF=14.9]** Liu Xue. et al. Carcinoma-associated fibroblast-derived lysyl oxidase-rich extracellular vesicles mediate collagen crosslinking and promote epithelial-mesenchymal transition via p-FAK/p-paxillin/YAP signaling. INT J ORAL SCI. 2023 Aug;15(1):1-15 WB ;Bovine. 37532712