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## Recombinant Mouse BMP1 Protein, N-GST

Catalog Number: bs-105752P

Species: Mouse

AA Seq: 615-848/991

Predicted MW: 53.36 kDa

Tags: N-GST

Purity: >90% as determined by SDS-PAGE.

Purification: AC

Form: Lyophilized

Storage: Lyophilized from a solution in PBS pH 7.4, 0.02% NLS, 1mM EDTA, 4% Trehalose, 1% Mannitol.

Use a manual defrost freezer and avoid repeated freeze thaw cycles. Store at 2 to 8°C for frequent use. Store at -20 to -80°C for twelve months from the date of receipt.

**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.