

BMP1 Antibody
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP22289a

Specification

BMP1 Antibody - Product Information

Application	IF, WB,E
Primary Accession	P13497
Reactivity	Human
Host	Rabbit
Clonality	polyclonal
Isotype	Rabbit IgG
Calculated MW	111249

BMP1 Antibody - Additional Information

Gene ID 649

Other Names

Bone morphogenetic protein 1, BMP-1, 3.4.24.19, Mammalian tolloid protein, mTld, Procollagen C-proteinase, PCP, BMP1, PCOLC

Target/Specificity

This BMP1 antibody is generated from a rabbit immunized with a recombinant protein of human BMP1.

Dilution

IF~~1:25

WB~~1:2000

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

BMP1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

BMP1 Antibody - Protein Information

Name BMP1

Synonyms PCOLC

Function Metalloprotease that plays key roles in regulating the formation of the extracellular

matrix (ECM) via processing of various precursor proteins into mature functional enzymes or structural proteins (PubMed:[33206546](#)). Thereby participates in several developmental and physiological processes such as cartilage and bone formation, muscle growth and homeostasis, wound healing and tissue repair (PubMed:[32636307](#), PubMed:[33169406](#)). Roles in ECM formation include cleavage of the C-terminal propeptides from procollagens such as procollagen I, II and III or the proteolytic activation of the enzyme lysyl oxidase LOX, necessary to formation of covalent cross- links in collagen and elastic fibers (PubMed:[31152061](#), PubMed:[33206546](#)). Additional substrates include matricellular thrombospondin-1/THBS1 whose cleavage leads to cell adhesion disruption and TGF-beta activation (PubMed:[32636307](#)).

Cellular Location

Golgi apparatus, trans-Golgi network. Secreted, extracellular space, extracellular matrix. Secreted. Note=Co-localizes with POSTN in the Golgi.

Tissue Location

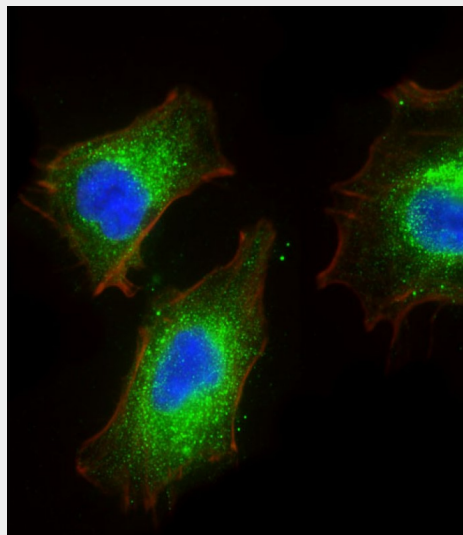
Ubiquitous.

BMP1 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

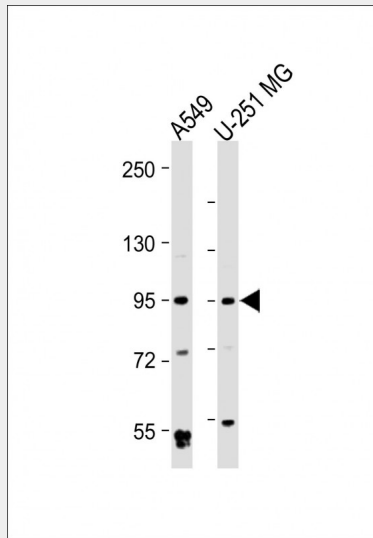
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

BMP1 Antibody - Images

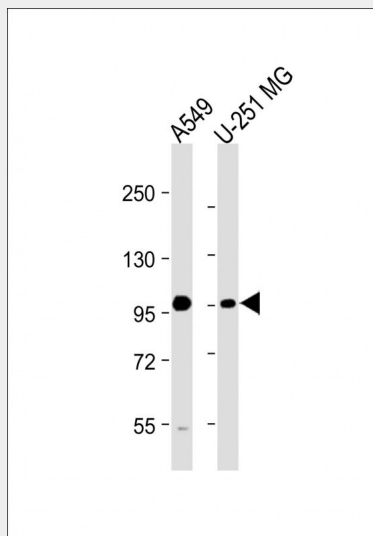


Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized A549 cells labeling BMP1 with AP22289a at 1/25 dilution, followed by Dylight® 488-conjugated goat anti-Rabbit IgG (OH191631) secondary antibody at 1/200 dilution (green). Immunofluorescence image showing cytoplasm staining on A549 cell line. Cytoplasmic actin is detected with Dylight® 554 Phalloidin (1186255) at 1/500 dilution (red). The nuclear counter stain

is DAPI (blue).



All lanes : Anti-BMP1 Antibody at 1:2000 dilution Lane 1: A549 whole cell lysate Lane 2: U-251 MG whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 111 kDa Blocking/Dilution buffer: 5% NFDN/TBST.



All lanes : Anti-BMP1 Antibody at 1:2000 dilution Lane 1: A549 whole cell lysate Lane 2: U-251 MG whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 111 kDa Blocking/Dilution buffer: 5% NFDN/TBST.

BMP1 Antibody - Background

Cleaves the C-terminal propeptides of procollagen I, II and III. Induces cartilage and bone formation. May participate in dorsoventral patterning during early development by cleaving chordin (CHRD). Responsible for the proteolytic activation of lysyl oxidase LOX.

BMP1 Antibody - References

- Li S.W., et al. Proc. Natl. Acad. Sci. U.S.A. 93:5127-5130(1996).
- Wozney J.M., et al. Science 242:1528-1534(1988).
- Janitz M., et al. J. Mol. Med. 76:141-146(1998).

Takahara K.,et al.J. Biol. Chem. 269:32572-32578(1994).

Mural R.J.,et al.Submitted (SEP-2005) to the EMBL/GenBank/DDBJ databases.