

For Research Use Only

# BMP7 Polyclonal antibody, PBS Only

Catalog Number: 12221-1-PBS

Featured Product



## Basic Information

**Catalog Number:**

12221-1-PBS

**Size:**

100ug, Concentration: 1 mg/ml by Nanodrop;

**Source:**

Rabbit

**Isotype:**

IgG

**Immunogen Catalog Number:**

AG2902

**GenBank Accession Number:**

BC008584

**GeneID (NCBI):**

655

**UNIPROT ID:**

P18075

**Full Name:**

bone morphogenetic protein 7

**Calculated MW:**

431 aa, 49 kDa

**Observed MW:**

43-49 kDa

**Purification Method:**

Antigen affinity purification

## Applications

**Tested Applications:**

WB, IHC, IF/ICC, IP, Indirect ELISA

**Species Specificity:**

human

## Background Information

The bone morphogenetic proteins (BMPs) are a family of secreted signaling molecules that can induce ectopic bone growth. Many BMPs are part of the transforming growth factor-beta (TGFβ) superfamily. BMPs were originally identified by an ability of demineralized bone extract to induce endochondral osteogenesis in vivo in an extraskeletal site.

BMP7, also known as osteogenic protein-1 or OP-1, plays a key role in the transformation of mesenchymal cells into bone and cartilage. BMP7 may be involved in bone homeostasis (PMID: 15621726). It is expressed in the brain, kidneys and bladder. BMP7 is also present in cancers, including breast, prostate, and colon cancers, in which it is implicated in regulating cancer cell proliferation (PMID: 16419056, PMID: 15531927). Overexpression of BMP7 mRNA in colorectal cancer patients was significantly associated with poor prognosis and low overall survival (PMID: 18259822). Recent studies suggest that high-expression level of BMP7 serves as a biomarker for poor prognosis for HCC (PMID: 23179403).

## Storage

**Storage:**

Store at -80°C.

**Storage Buffer:**

PBS Only

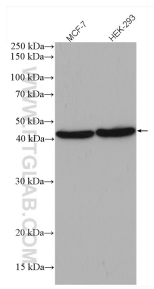
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

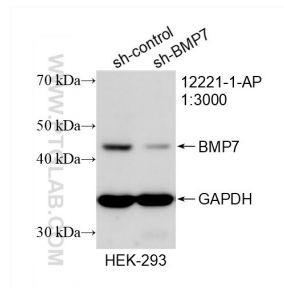
E: [proteintech@ptglab.com](mailto:proteintech@ptglab.com)  
W: [ptglab.com](http://ptglab.com)

**This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.**

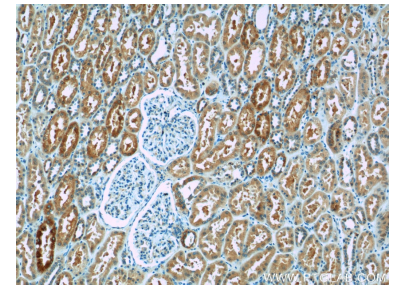
## Selected Validation Data



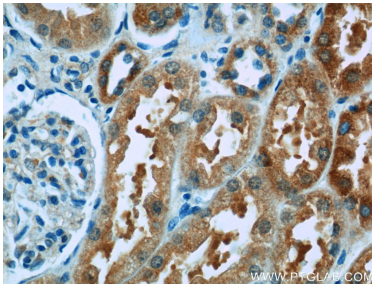
Various lysates were subjected to SDS PAGE followed by western blot with 12221-1-AP (BMP7 antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 12221-1-PBS in a different storage buffer formulation.



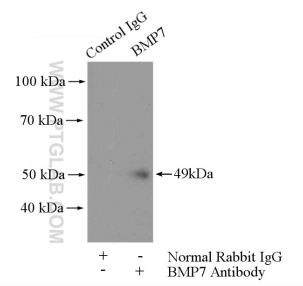
WB result of BMP7 antibody (12221-1-AP; 1:3000; incubated at room temperature for 1.5 hours) with sh-Control and sh-BMP7 transfected HEK-293 cells. This data was developed using the same antibody clone with 12221-1-PBS in a different storage buffer formulation.



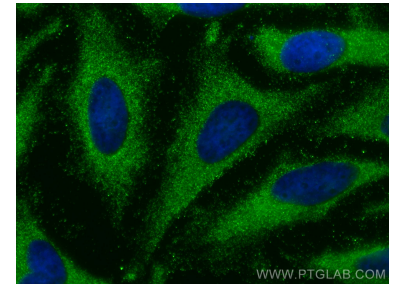
Immunohistochemical analysis of paraffin-embedded human kidney tissue slide using 12221-1-AP (BMP7 Antibody) at dilution of 1:50 (under 10x lens). This data was developed using the same antibody clone with 12221-1-PBS in a different storage buffer formulation.



Immunohistochemical analysis of paraffin-embedded human kidney tissue slide using 12221-1-AP (BMP7 Antibody) at dilution of 1:50 (under 40x lens). This data was developed using the same antibody clone with 12221-1-PBS in a different storage buffer formulation.



IP result of anti-BMP7 (IP:12221-1-AP, 4ug; Detection:12221-1-AP 1:800) with HEK-293 cells lysate 2800ug. This data was developed using the same antibody clone with 12221-1-PBS in a different storage buffer formulation.



Immunofluorescent analysis of (-20°C Methanol) fixed HeLa cells using BMP7 antibody (12221-1-AP) at dilution of 1:200 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L). This data was developed using the same antibody clone with 12221-1-PBS in a different storage buffer formulation.