

For Research Use Only

# NeutraKine® BMP-7 Monoclonal antibody



Catalog Number: 69011-1-Ig

## Basic Information

<b>Catalog Number:</b> 69011-1-Ig	<b>GenBank Accession Number:</b> GeneID (NCBI): 655	<b>Purification Method:</b> Protein G purification
<b>Size:</b> Source: Mouse	<b>Full Name:</b> bone morphogenetic protein 7	<b>CloneNo.:</b> 3E9G7
<b>Isotype:</b> IgG1		
<b>Immunogen Catalog Number:</b> HZ-1229		

## Applications

**Tested Applications:**  
FC (Intra), Neutralization, ELISA

**Species Specificity:**  
Human, mouse

## 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).

This antibody can be used to neutralize the bioactivity of BMP-7.

## Storage

**Storage:**  
Lyophilized antibodies are stable for 1 year from the date of receipt if stored between (-20°C) and (-80°C). Upon reconstitution we recommend that the solution can be stored at(4°C) for short term or at(-20°C) to (-80°C) for long term. Repeated freeze thaw cycles should be avoided with reconstituted products.

**Storage Buffer:**  
Sterile PBS.

Aliquoting is unnecessary for -20°C storage

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

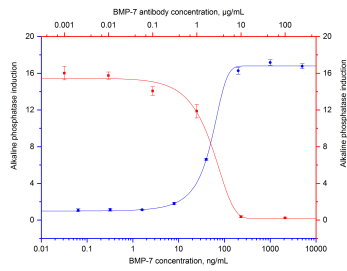
T: 4006900926

E: [Proteintech-CN@ptglab.com](mailto:Proteintech-CN@ptglab.com)

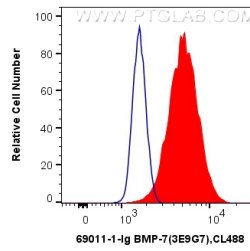
W: [ptgcn.com](http://ptgcn.com)

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## Selected Validation Data



Recombinant human BMP-7 (Cat.NO. HZ-1229) induces alkaline phosphatase production in the ATDC-5 cell line (using pNPP as chromogenic substrate for detection) in a dose dependent manner (blue curve, bottom X-left Y). The activity of human BMP-7 (200 ng/mL HZ-1229) is neutralized by mouse anti-human BMP-7 antibody 69011-1-Ig at serial dose (red curve, refer to top X-right Y). The ND50 is typically 1-2  $\mu$ g/mL.



$1 \times 10^6$  HEK-293 cells were intracellularly stained with 0.4  $\mu$ g Anti-Human NeutraKine<sup>®</sup> BMP-7 (69011-1-Ig, Clone:3E9G7) and CoraLite<sup>®</sup> 488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L) at dilution 1:1000 (red), or 0.4  $\mu$ g Control Antibody. Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).