

For Research Use Only

NeutraKine® BMP-7 Monoclonal antibody



Catalog Number: 69011-1-Ig

Basic Information

Catalog Number: 69011-1-Ig	GenBank Accession Number: GeneID (NCBI): 655	Purification Method: Protein G purification
Size: 100ug	Full Name: bone morphogenetic protein 7	CloneNo.: 3E9G7
Source: Mouse		
Isotype: IgG1		
Immunogen Catalog Number: 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 (TGFB) 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.

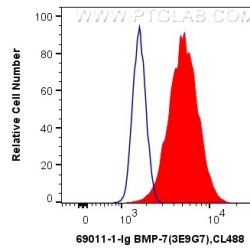
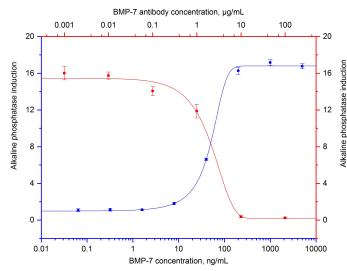
Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

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
W: ptglab.com

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

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 µg/mL.

1X10⁶ HEK-293 cells were intracellularly stained with 0.4 µg Anti-Human NeutraKine® BMP-7 (69011-1-Ig, Clone:3E9G7) and CoraLite® 488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L) at dilution 1:1000 (red), or 0.4 µg Control Antibody. Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).