

For Research Use Only

NeutraKine® BMP-7 Monoclonal antibody, PBS Only

Catalog Number: 69011-1-PBS



Basic Information

Catalog Number:

69011-1-PBS

Size:

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

Source:

Mouse

Isotype:

IgG1

Immunogen Catalog Number:

HZ-1229

GenBank Accession Number:

GeneID (NCBI):

655

UNIPROT ID:

P18075

Full Name:

bone morphogenetic protein 7

Purification Method:

Protein G purification

CloneNo.:

3E9G7

Applications

Tested Applications:

FC (Intra), Neutralization, Indirect 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:

Store at -80°C.

Storage Buffer:

PBS only, pH7.3

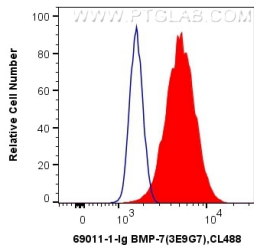
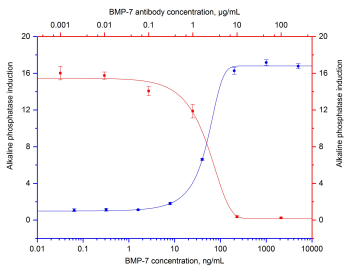
For technical support and original validation data for this product please contact:

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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. This data was developed using the same



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. This data was developed using the same antibody clone with 69011-1-PBS in a different storage buffer formulation.