## For Research Use Only

## CoraLite® Plus 488-conjugated BMP7 Polyclonal antibody



Catalog Number: CL488-12221

**Featured Product** 

**Basic Information** 

Catalog Number: CL488-12221

1000 µg/ml

Source: Rabbit Isotype:

Immunogen Catalog Number:

AG2902

GenBank Accession Number:

GeneID (NCBI):

**UNIPROT ID:** P18075 Full Name:

BC008584

bone morphogenetic protein 7

Calculated MW: 431 aa, 49 kDa Observed MW:

43-49 kDa

**Purification Method:** 

Antigen affinity purification Recommended Dilutions: IF/ICC 1:50-1:500

Excitation/Emission maxima wavelengths:

493 nm / 522 nm

**Applications** 

**Tested Applications:** IF/ICC, FC (Intra) Species Specificity: human, mouse

Positive Controls: IF/ICC: HeLa cells,

## **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).

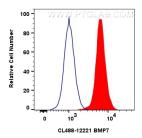
Storage

Store at -20°C. Avoid exposure to light. Stable for one year after shipment.

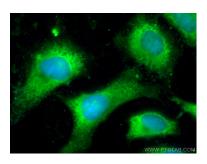
PBS with 50% Glycerol, 0.05% Proclin300, 0.5% BSA, pH 7.3.

Aliquoting is unnecessary for -20°C storage

## Selected Validation Data



1x10^6 HEK-293 cells were intracellularly stained with 0.8 ug Coralite® Plus 488 Bmp7 Polyclonal Antibody (CL488-12221)(red), or 0.8 ug Coralite® Plus 488-conjugated Rabbit IgG control Rabbit PolyAb (CL488-30000) (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).



Immunofluorescent analysis of (-20°C Ethanol) fixed HeLa cells using CoraLite® Plus 488 BMP7 antibody (CL488-12221) at dilution of 1:200.