

## Product datasheet

### Anti-BMP2 antibody [EPR24209-61] ab284387

Recombinant RabMAb

7 Images

#### Overview

<b>Product name</b>	Anti-BMP2 antibody [EPR24209-61]
<b>Description</b>	Rabbit monoclonal [EPR24209-61] to BMP2
<b>Host species</b>	Rabbit
<b>Tested applications</b>	<b>Suitable for:</b> Flow Cyt (Intra), WB, IP, ICC/IF <b>Unsuitable for:</b> IHC-P
<b>Species reactivity</b>	<b>Reacts with:</b> Mouse, Rat, Human
<b>Immunogen</b>	Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.
<b>Positive control</b>	WB: Caco-2, Saos-2, LNCaP, C2C12, RAW 264.7, C6 and Mouse lung, Rat spleen lysates. ICC/IF: Caco-2, RAW 264.7 cells. Flow Cyt: Caco-2, RAW264.7 cells. IP: Saos-2 cell.
<b>General notes</b>	This product is a recombinant monoclonal antibody, which offers several advantages including: <ul style="list-style-type: none"> <li>- High batch-to-batch consistency and reproducibility</li> <li>- Improved sensitivity and specificity</li> <li>- Long-term security of supply</li> <li>- Animal-free production</li> </ul> For more information <a href="#">see here</a> . Our RabMAb <sup>®</sup> technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to <a href="#">RabMAb<sup>®</sup> patents</a> .

#### Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
<b>Storage buffer</b>	pH: 7.20 Preservative: 0.01% Sodium azide Constituents: 59% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA
<b>Purity</b>	Protein A purified
<b>Clonality</b>	Monoclonal
<b>Clone number</b>	EPR24209-61

Isotype

IgG

## Applications

### The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab284387 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
Flow Cyt (Intra)		1/600.
WB		1/1000. Predicted molecular weight: 44 kDa.
IP		1/30.
ICC/IF		1/100.

### Application notes

Is unsuitable for IHC-P.

## Target

### Function

Induces cartilage and bone formation.

### Tissue specificity

Particularly abundant in lung, spleen and colon and in low but significant levels in heart, brain, placenta, liver, skeletal muscle, kidney, pancreas, prostate, ovary and small intestine.

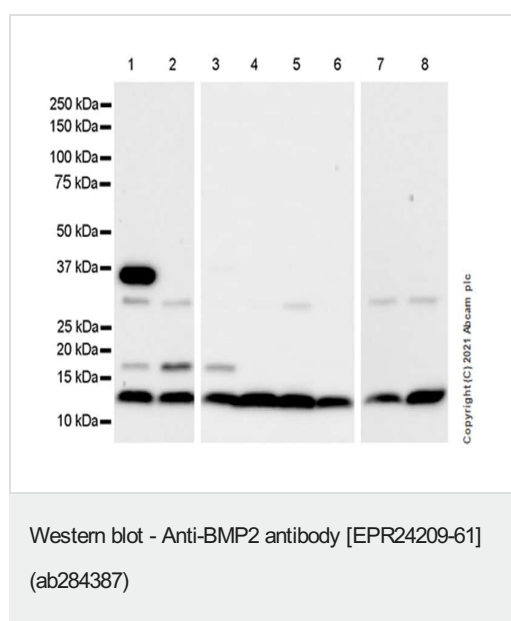
### Sequence similarities

Belongs to the TGF-beta family.

### Cellular localization

Secreted.

## Images



**All lanes** : Anti-BMP2 antibody [EPR24209-61] (ab284387) at 1/1000 dilution

**Lane 1** : Caco-2 (human colorectal adenocarcinoma epithelial cell) whole cell lysate

**Lane 2** : Saos-2 (human osteosarcoma epithelial) whole cell lysate

**Lane 3** : LNCaP (human prostate carcinoma epithelial cell) whole cell lysate

**Lane 4** : C2C12 (mouse myoblasts myoblast) whole cell lysate

**Lane 5** : RAW 264.7 (mouse abelson murine leukemia virus-induced tumor macrophage) whole cell lysate

**Lane 6** : C6 (rat glial tumor glial cell) whole cell lysate

**Lane 7** : Mouse lung tissue lysate

**Lane 8** : Rat spleen tissue lysate

Lysates/proteins at 20 µg per lane.

## Secondary

**All lanes** : Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated ([ab97051](#)) at 1/50000 dilution

**Predicted band size:** 44 kDa

Blocking and diluting buffer and concentration: 5% NFDm/TBST

The molecular weight observed is consistent with literature.

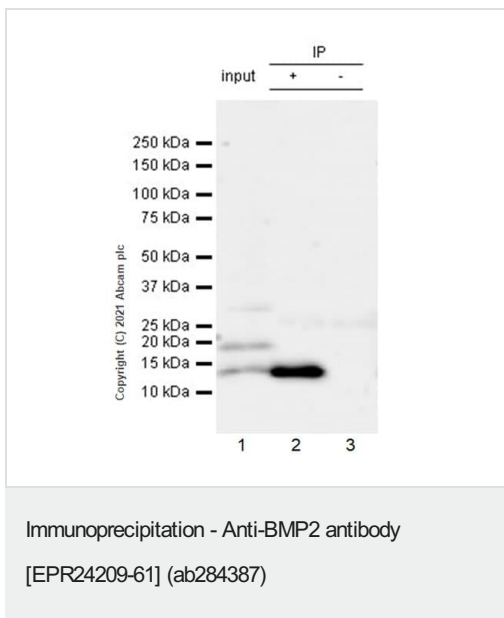
Bands observed at 14KD are monomers (PMID: 12819188, PMID: 3200834).

Bands observed at 18KD are glycosylated monomers (PMID: 12819188, PMID: 8117284, PMID: 16261447, PMID: 3200834).

Bands observed at ~30KD are dimers or glycosylated dimers (PMID: 22508088, PMID: 16261447, PMID: 3200834).

Bands observed at ~38kD is another isoform (PMID: 20230640)

Exposure time: Lanes 1-2: 37 seconds; Lanes 3-6: 8 seconds; Lanes 7-8: 37 seconds



BMP2 was immunoprecipitated from 0.35 mg Saos-2 (human osteosarcoma epithelial) whole cell lysate 10 ug with ab284387 at 1/30 dilution (2ug in 0.35mg lysates). Western blot was performed on the immunoprecipitate using ab284387 at 1/1000 dilution. VeriBlot for IP secondary antibody (HRP) ([ab131366](#)) was used at 1/5000 dilution.

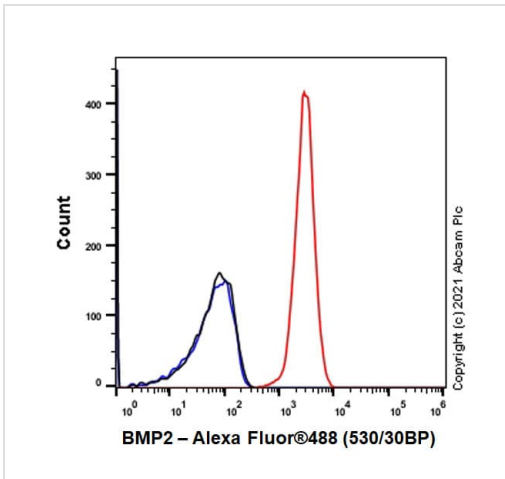
Lane 1: Saos-2 (human osteosarcoma epithelial) whole cell lysate 10 ug

Lane 2: ab284387 IP in Saos-2 whole cell lysate

Lane 3: Rabbit monoclonal IgG ([ab172730](#)) instead of ab284387 in Saos-2 whole cell lysate

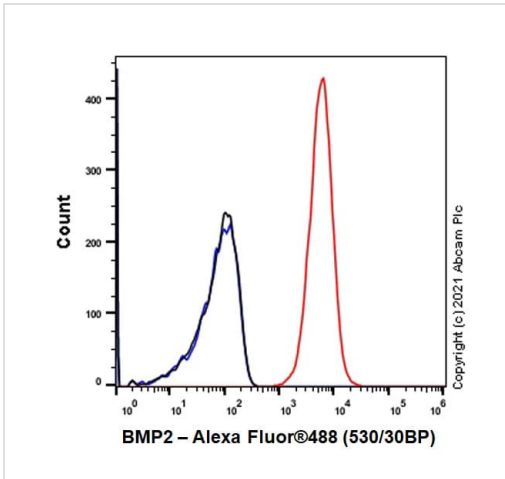
Blocking and dilution buffer and concentration: 5% NFDm/TBST.

Exposure time: 24 seconds.



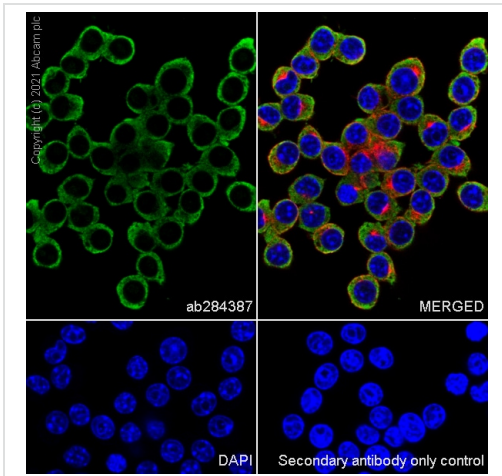
Flow cytometric analysis of 4% paraformaldehyde fixed 90% methanol permeabilized RAW264.7 (mouse Abelson murine leukemia virus-induced tumor macrophage) cells labelling BMP2 with ab284387 at 1/500 dilution (0.1ug) (Red) compared with a Rabbit monoclonal IgG (**ab172730**) (Black) isotype control and an unlabelled control (cells without incubation with primary antibody and secondary antibody) (Blue). A Goat Anti-Rabbit IgG (Alexa Fluor® 488, **ab150081**) at 1/2000 dilution was used as the secondary antibody.

Flow Cytometry (Intracellular) - Anti-BMP2 antibody [EPR24209-61] (ab284387)



Flow cytometric analysis of 4% paraformaldehyde fixed 90% methanol permeabilized Caco-2 (human colorectal adenocarcinoma epithelial cell) cells labelling BMP2 with ab284387 at 1/500 dilution (0.1ug) (Red) compared with a Rabbit monoclonal IgG (**ab172730**) (Black) isotype control and an unlabelled control (cells without incubation with primary antibody and secondary antibody) (Blue). A Goat Anti-Rabbit IgG (Alexa Fluor® 488, **ab150081**) at 1/2000 dilution was used as the secondary antibody.

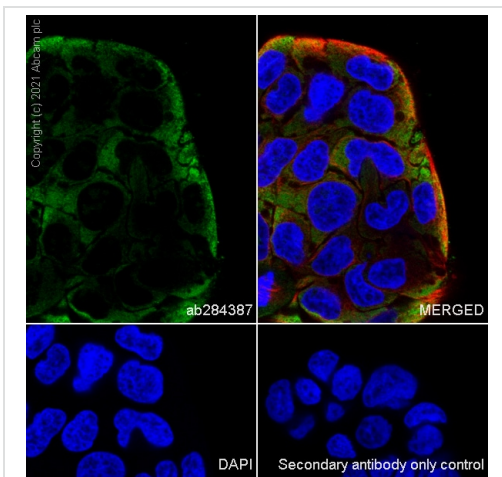
Flow Cytometry (Intracellular) - Anti-BMP2 antibody [EPR24209-61] (ab284387)



Immunocytochemistry/ Immunofluorescence - Anti-BMP2 antibody [EPR24209-61] (ab284387)

Immunofluorescent analysis of 4% Paraformaldehyde-fixed, 0.1% TritonX-100 permeabilized RAW 264.7 cells labelling BMP2 with ab284387 at 1/100 dilution, followed by **ab150081** Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed antibody at 1/1000 dilution (Green). Confocal image showing cytoplasmic staining in RAW 264.7 cells is observed. **ab195889** Anti-alpha Tubulin mouse monoclonal antibody - Microtubule Marker (Alexa Fluor® 594) was used to counterstain tubulin at 1/200 dilution (Red). The Nuclear counterstain was DAPI (Blue).

Secondary antibody only control: Secondary antibody is **ab150081** Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed at 1/1000 dilution.



Immunocytochemistry/ Immunofluorescence - Anti-BMP2 antibody [EPR24209-61] (ab284387)

Immunofluorescent analysis of 4% Paraformaldehyde-fixed, 0.1% TritonX-100 permeabilized Caco-2 cells labelling BMP2 with ab284387 at 1/100 dilution, followed by **ab150081** Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed antibody at 1/1000 dilution (Green). Confocal image showing cytoplasmic staining in Caco-2 cells is observed. **ab195889** Anti-alpha Tubulin mouse monoclonal antibody - Microtubule Marker (Alexa Fluor® 594) was used to counterstain tubulin at 1/200 dilution (Red). The Nuclear counterstain was DAPI (Blue).

Secondary antibody only control: Secondary antibody is **ab150081** Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed at 1/1000 dilution.

### Why choose a recombinant antibody?



**Research with confidence**  
Consistent and reproducible results



**Long-term and scalable supply**  
Recombinant technology



**Success from the first experiment**  
Confirmed specificity



**Ethical standards compliant**  
Animal-free production

Anti-BMP2 antibody [EPR24209-61] (ab284387)

## **Our Abpromise to you: Quality guaranteed and expert technical support**

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- Replacement or refund for products not performing as stated on the datasheet
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- Response to your inquiry within 24 hours
  
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

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