

## BMP-2 Polyclonal Antibody

<b>Catalog No :</b>	YT5651
<b>Reactivity :</b>	Human;Mouse;Rat
<b>Applications :</b>	IF;WB;IHC;ELISA
<b>Target :</b>	BMP-2
<b>Fields :</b>	>>Cytokine-cytokine receptor interaction;>>TGF-beta signaling pathway;>>Hippo signaling pathway;>>Pathways in cancer;>>Basal cell carcinoma
<b>Gene Name :</b>	BMP2
<b>Protein Name :</b>	Bone morphogenetic protein 2
<b>Human Gene Id :</b>	650
<b>Human Swiss Prot No :</b>	P12643
<b>Mouse Gene Id :</b>	12156
<b>Mouse Swiss Prot No :</b>	P21274
<b>Rat Gene Id :</b>	29373
<b>Rat Swiss Prot No :</b>	P49001
<b>Immunogen :</b>	Synthesized peptide derived from Bone morphogenetic protein 2 at AA range: 341-390
<b>Specificity :</b>	BMP-2 Polyclonal Antibody detects endogenous levels of BMP-2 protein.
<b>Formulation :</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
<b>Source :</b>	Polyclonal, Rabbit,IgG
<b>Dilution :</b>	IF 1:50-200 WB 1:500 - 1:2000. IHC: 1:100-1:300. ELISA: 1:10000. Not yet

tested in other applications.

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**Purification :** The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.

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**Concentration :** 1 mg/ml

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**Storage Stability :** -15°C to -25°C/1 year(Do not lower than -25°C)

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**Observed Band :** 44kD

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**Cell Pathway :** Cytokine-cytokine receptor interaction;Hedgehog;TGF-beta;Pathways in cancer;Basal cell carcinoma;

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**Background :** This gene encodes a secreted ligand of the TGF-beta (transforming growth factor-beta) superfamily of proteins. Ligands of this family bind various TGF-beta receptors leading to recruitment and activation of SMAD family transcription factors that regulate gene expression. The encoded preproprotein is proteolytically processed to generate each subunit of the disulfide-linked homodimer, which plays a role in bone and cartilage development. Duplication of a regulatory region downstream of this gene causes a form of brachydactyly characterized by a malformed index finger and second toe in human patients. [provided by RefSeq, Jul 2016],

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**Function :** function:Induces cartilage and bone formation.,online information:Bone morphogenetic protein 2 entry,similarity:Belongs to the TGF-beta family.,subunit:Homodimer; disulfide-linked. Interacts with GREM2 (By similarity) and SOSTDC1.,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.,

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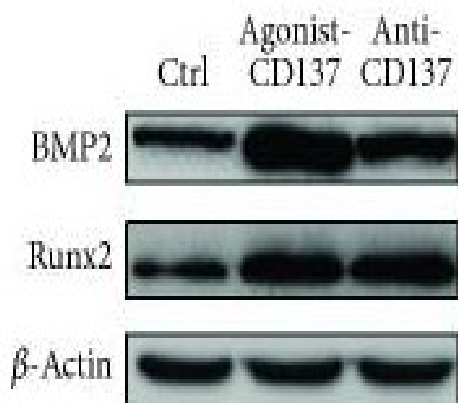
**Subcellular Location :** Secreted.

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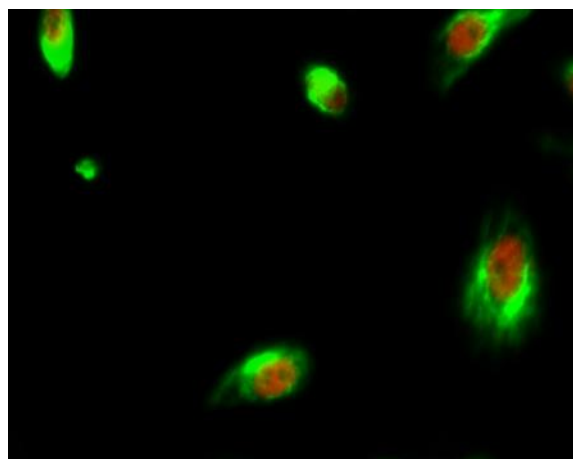
**Expression :** Particularly abundant in lung, spleen and colon and in low but significant levels in heart, brain, placenta, liver, skeletal muscle, kidney, pancreas, prostate, ovary and small intestine.

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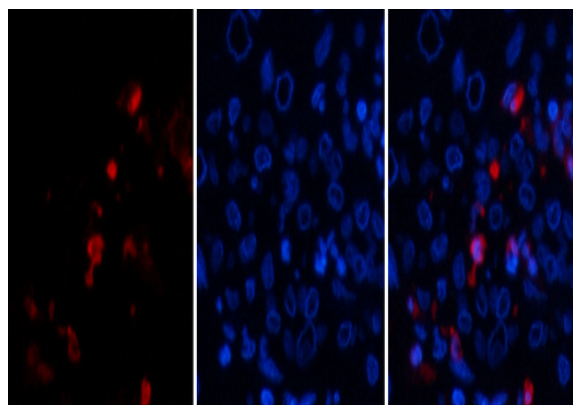
## Products Images



Chen, Rui, et al. "Activation of CD137 Signaling Enhances Vascular Calcification through c-Jun N-Terminal Kinase-Dependent Disruption of Autophagic Flux." *Mediators of inflammation* 2018 (2018).



Immunofluorescence analysis of HeLa cell. 1, BMP-2 Polyclonal Antibody (green) was diluted at 1:200 (4° overnight). (red) was diluted at 1:200 (4° overnight). 2, Goat Anti Rabbit Alexa Fluor 488 Catalog: RS3211 was diluted at 1:1000 (room temperature, 50min). Goat Anti Mouse Alexa Fluor 594 Catalog: RS3608 was diluted at 1:1000 (room temperature, 50min).

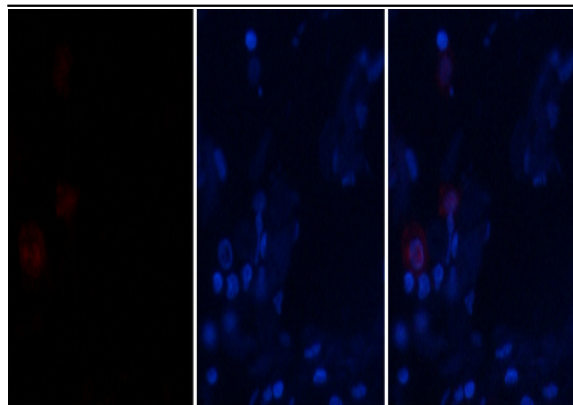


Immunofluorescence analysis of human liver tissue. 1, BMP-2 Polyclonal Antibody (red) was diluted at 1:200 (4° C, overnight). 2, Cy3 labeled Secondary antibody was diluted at 1:300 (room temperature, 50min). 3, Picture B: DAPI (blue) 10min. Picture A: Target. Picture B: DAPI. Picture C: merge of A+B

A

B

C

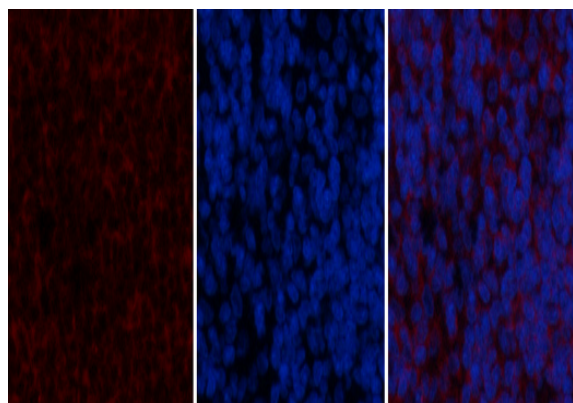


A

B

C

Immunofluorescence analysis of human-lung tissue. 1, BMP-2 Polyclonal Antibody (red) was diluted at 1:200 (4 °C, overnight). 2, Cy3 labeled Secondary antibody was diluted at 1:300 (room temperature, 50 min). 3, Picture B: DAPI (blue) 10 min. Picture A: Target. Picture B: DAPI. Picture C: merge of A+B

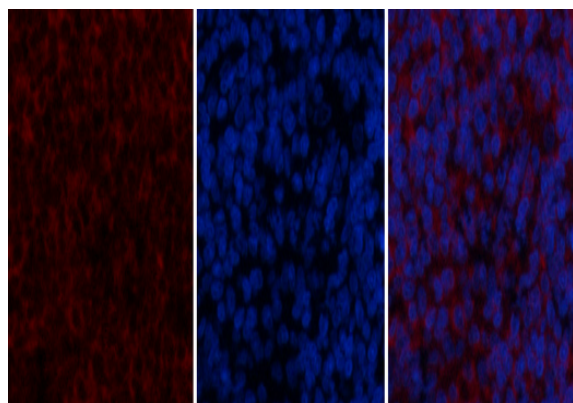


A

B

C

Immunofluorescence analysis of rat-spleen tissue. 1, BMP-2 Polyclonal Antibody (red) was diluted at 1:200 (4 °C, overnight). 2, Cy3 labeled Secondary antibody was diluted at 1:300 (room temperature, 50 min). 3, Picture B: DAPI (blue) 10 min. Picture A: Target. Picture B: DAPI. Picture C: merge of A+B

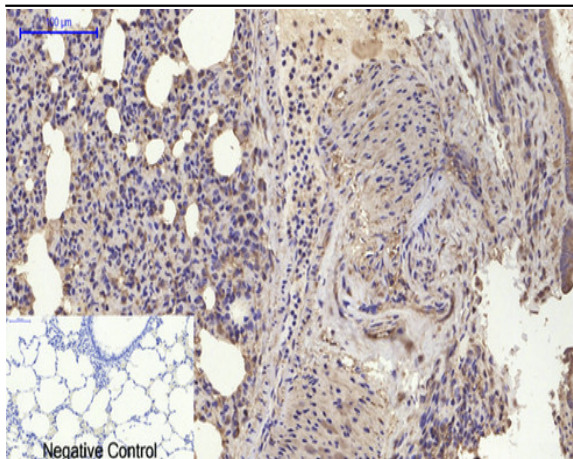


A

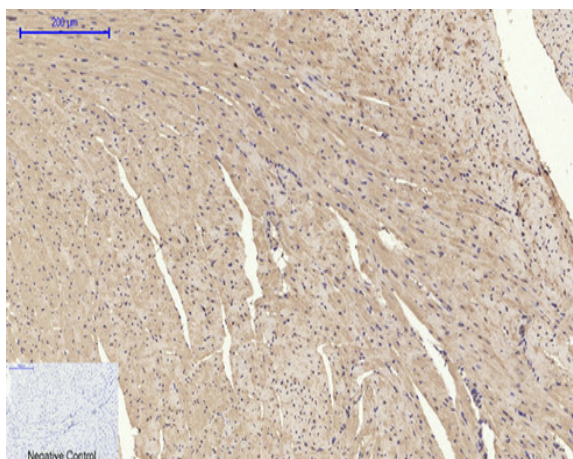
B

C

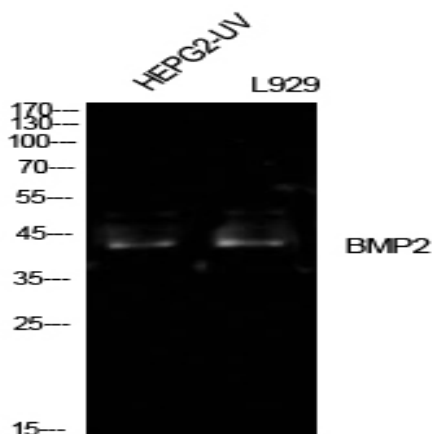
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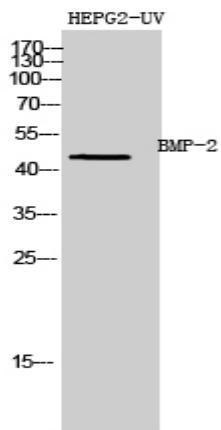
Immunohistochemical analysis of paraffin-embedded Rat-lung tissue. 1, BMP-2 Polyclonal Antibody was diluted at 1:200(4°C, overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C, 20min). 3, Secondary antibody was diluted at 1:200(room temperature, 30min). Negative control was used by secondary antibody only.



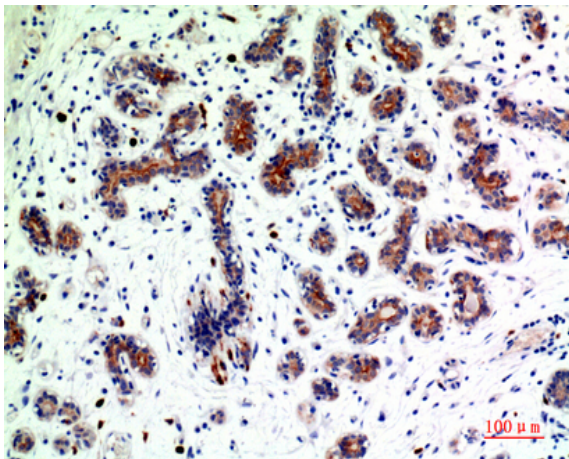
Immunohistochemical analysis of paraffin-embedded Mouse-heart tissue. 1, BMP-2 Polyclonal Antibody was diluted at 1:200(4°C, overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C, 20min). 3, Secondary antibody was diluted at 1:200(room temperature, 30min). Negative control was used by secondary antibody only.



Western Blot analysis of HepG2-UV, L929 cells using BMP-2 Polyclonal Antibody. Antibody was diluted at 1:1000. Secondary antibody(catalog#:RS0002) was diluted at 1:20000



Western Blot analysis of HEPG2-UV cells using BMP-2 Polyclonal Antibody diluted at 1:1000. Secondary antibody(catalog#:RS0002) was diluted at 1:20000



Immunohistochemical analysis of paraffin-embedded human-breast-cancer, antibody was diluted at 1:200