

Mouse Anti-BMP2 [1C5C2]: MC0539

Intended Use: For Research Use Only

Description: Bone morphogenetic protein-2 (BMP-2) is a member of the transforming growth factor-beta (TGFB) superfamily. BMP2 is synthesized as a 60 kDa precursor that is processed in the secretory pathway to a small 18 kDa monomer; 2 monomers then associate to form the active 30 kDa homodimer, which binds to its receptor. There is also a 40-45 kDa form of BMP2, as an amino-terminal propeptide. BMP2 can induce bone formation and regeneration during early embryonic development. It is involved in the hedgehog pathway, TGF beta signaling pathway, and cytokine-cytokine receptor interaction.

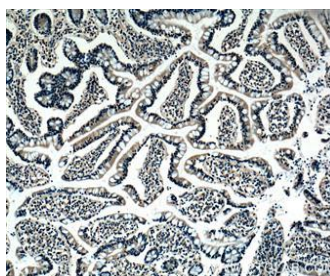
Specifications

Clone: 1C5C2
 Source: Mouse
 Isotype: IgG2a
 Reactivity: Human, pig
 Localization: Secreted
 Formulation: Antibody in PBS pH7.4, containing BSA and ≤ 0.09% sodium azide (NaN₃)
 Storage: Store at 2°- 8°C
 Applications: IHC, ELISA, WB
 Package:

Description	Catalog No.	Size
BMP2 Concentrated	MC0539	1 ml

IHC Procedure

Positive Control Tissue: Small intestine
 Concentrated Dilution: 10-100
 Pretreatment: Tris EDTA pH9.0, 15 minutes using Pressure Cooker, or 30-60 minutes using water bath at 95°-99°C
 Incubation Time and Temp: 30-60 minutes @ RT
 Detection: Refer to the detection system manual
 * Result should be confirmed by an established diagnostic procedure.



FFPE human small intestine stained with anti-BMP2 using DAB

References:

1. Endogenous bone morphogenetic protein 2 plays a role in vascular smooth muscle cell calcification induced by interleukin 6 in vitro. Sun M, et al. Int J Immunopathol Pharmacol 30:227-237, 2017.
2. Adenovirus-Mediated Expression of BMP-2 and BFGF in Bone Marrow Mesenchymal Stem Cells Combined with Demineralized Bone Matrix For Repair of Femoral Head Osteonecrosis in Beagle Dogs. Peng WX & Wang L Cell Physiol Biochem 43:1648-1662, 2017.
3. The osteogenic potential of human bone callus. Han W, et al. Sci Rep 6:36330, 2016.
4. Disequilibrium of BMP2 levels in the breast stem cell niche launches epithelial transformation by overamplifying BMPR1B cell response. Chapellier M, et al. Stem Cell Reports 4:239-54, 2015.
5. Bone resorption and remodeling in murine collagenase-induced osteoarthritis after administration of glucosamine. Ivanovska N & Dimitrova P. Arthritis Res Ther 13:R44, 2011.

Doc. 100-MC0539
Rev. A