

BMP-6 (74219.11): sc-57042

BACKGROUND

Bone morphogenic proteins (BMPs) are members of the TGF β superfamily. BMPs are involved in the induction of cartilage and bone formation. *In vivo* studies have shown that BMP-2 (also designated BMP-2A) and BMP-3 can independently induce cartilage formation. Smad3 association with the TGF β receptor complex and Smad1 translocation to the nucleus are observed after the addition of BMP-4 (also designated BMP-2B), suggesting that BMP-4 may play a role in activation of the Smad pathway. BMP-5, BMP-6 and BMP-7 all share high sequence homology with BMP-2, indicating that they each may be able to induce cartilage formation. BMP-8 (also designated OP-2) is thought to be involved in early development, as detectable expression has not been found in adult organs.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: BMP6 (human) mapping to 6p24.3.

SOURCE

BMP-6 (74219.11) is a mouse monoclonal antibody raised against a recombinant protein fragment corresponding to amino acids 296-428 of BMP-6 of human origin.

PRODUCT

Each vial contains 100 μ g IgG_{2b} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and protein stabilizer.

APPLICATIONS

BMP-6 (74219.11) is recommended for detection of BMP-6 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with recombinant human BMP-2, BMP-4, BMP-5 and BMP-7 under reducing conditions.

Suitable for use as control antibody for BMP-6 siRNA (h): sc-37066, BMP-6 shRNA Plasmid (h): sc-37066-SH and BMP-6 shRNA (h) Lentiviral Particles: sc-37066-V.

Molecular Weight of BMP-6 precursor: 90 kDa.

Molecular Weight of mature BMP-6: 23 kDa.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:
1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz MarkerTM Molecular Weight Standards: sc-2035, UltraCruz[®] Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

SELECT PRODUCT CITATIONS

1. Mi, D., Zhang, M., Yan, J., Zhang, J., Wang, X., Wang, Q., Yang, S. and Zhu, T. 2011. PTHrP inhibits BMP-6 expression through the PKA signaling pathway in breast cancer cells. *J. Cancer Res. Clin. Oncol.* 137: 295-303.
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STORAGE

For immediate and continuous use, store at 4° C for up to one month. For sporadic use, freeze in working aliquots in order to avoid repeated freeze/thaw cycles. If turbidity is evident upon prolonged storage, clarify solution by centrifugation.

RESEARCH USE

For research use only, not for use in diagnostic procedures.