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- Trockeneiszuschlag
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- Expressversand

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# BMP-9 (h2): 293T Lysate: sc-370246

## BACKGROUND

Bone morphogenic protein-9 (BMP-9), like other members of the TGF  $\beta$  growth factor superfamily, plays an important role in tissue morphogenesis, particularly in bone and connective tissue. Additionally, liver cells such as HepG2 express receptors to BMP-9, through which it stimulates cell proliferation and regulates blood glucose concentration, an effect not observed in treatment with TGF- $\beta$ . These *in vivo* activities appear to be exploitable in novel therapies; research shows that addition of BMP-9 or BMP-9 encoding adenoviral vectors promote bone formation *ex vivo* and in immune deficient animals.

## REFERENCES

1. Song, J.J., Celeste, A.J., Kong, F.M., Jirtle, R.L., Rosen, V. and Thies, R.S. 1995. Bone morphogenetic protein-9 binds to liver cells and stimulates proliferation. *Endocrinology* 136: 4293-4297.
2. Majumdar, M.K., Wang, E. and Morris, E.A. 2001. BMP-2 and BMP-9 promotes chondrogenic differentiation of human multipotential mesenchymal cells and overcomes the inhibitory effect of IL-1. *J. Cell. Physiol.* 189: 275-284.
3. Chen, C., Grzegorzewski, K.J., Barash, S., Zhao, Q., Schneider, H., Wang, Q., Singh, M., Pukac, L., Bell, A.C., Duan, R., et al. 2003. An integrated functional genomics screening program reveals a role for BMP-9 in glucose homeostasis. *Nat. Biotechnol.* 21: 294-301.
4. Dayoub, H., Dumont, R.J., Li, J.Z., Dumont, A.S., Hankins, G.R., Kallmes, D.F. and Helm, G.A. 2003. Human mesenchymal stem cells transduced with recombinant bone morphogenetic protein-9 adenovirus promote osteogenesis in rodents. *Tissue Eng.* 9: 347-356.
5. Li, J.Z., Li, H., Sasaki, T., Holman, D., Beres, B., Dumont, R.J., Pittman, D.D., Hankins, G.R. and Helm, G.A. 2003. Osteogenic potential of five different recombinant human bone morphogenetic protein adenoviral vectors in the rat. *Gene Ther.* 10: 1735-1743.

## CHROMOSOMAL LOCATION

Genetic locus: GDF2 (human) mapping to 10q11.22.

## PRODUCT

BMP-9 (h2): 293T Lysate represents a lysate of human BMP-9 transfected 293T cells and is provided as 100  $\mu$ g protein in 200  $\mu$ l SDS-PAGE buffer.

## APPLICATIONS

BMP-9 (h2): 293T Lysate is suitable as a Western Blotting positive control for human reactive BMP-9 antibodies. Recommended use: 10-20  $\mu$ l per lane.

Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

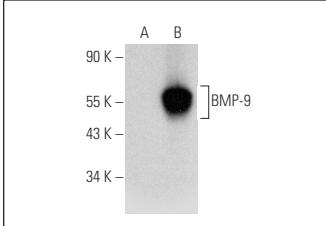
BMP-9 (H-3): sc-514211 is recommended as a positive control antibody for Western Blot analysis of enhanced human BMP-9 expression in BMP-9 transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

## RECOMMENDED SUPPORT REAGENTS

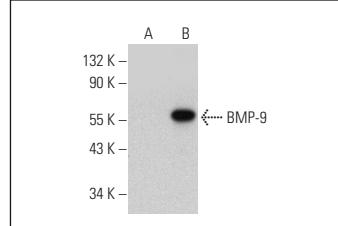
To ensure optimal results, the following support reagents are recommended:

- 1) Western Blotting: use m-IgG $\kappa$  BP-HRP: sc-516102 or m-IgG $\kappa$  BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

## DATA



BMP-9 (H-3): sc-514211. Western blot analysis of BMP-9 expression in non-transfected: sc-117752 (**A**) and human BMP-9 transfected: sc-370246 (**B**) 293T whole cell lysates.



BMP-9 (H-6): sc-515256. Western blot analysis of BMP-9 expression in non-transfected: sc-117752 (**A**) and human BMP-9 transfected: sc-370246 (**B**) 293T whole cell lysates.

## STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

## RESEARCH USE

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

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) for detailed protocols and support products.