

BMP-9 (E-2): sc-515249

BACKGROUND

Bone morphogenetic protein-9 (BMP-9), like other members of the TGF β growth factor superfamily, plays an important role in tissue morphogenesis, particularly in bone and connective tissue. Additionally, liver cells such as Hep G2 express receptors to BMP-9, through which it stimulates cell proliferation and regulates blood glucose concentration, an effect not observed in treatment with TGF- β . 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

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CHROMOSOMAL LOCATION

Genetic locus: GDF2 (human) mapping to 10q11.22; Gdf2 (mouse) mapping to 14 B.

SOURCE

BMP-9 (E-2) is a mouse monoclonal antibody raised against amino acids 71-149 mapping within an internal region of BMP-9 of mouse origin.

PRODUCT

Each vial contains 200 μ g IgG_{2a} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

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

APPLICATIONS

BMP-9 (E-2) is recommended for detection of BMP-9 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

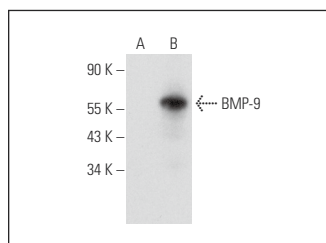
Suitable for use as control antibody for BMP-9 siRNA (h): sc-39756, BMP-9 siRNA (m): sc-39757, BMP-9 shRNA Plasmid (h): sc-39756-SH, BMP-9 shRNA Plasmid (m): sc-39757-SH, BMP-9 shRNA (h) Lentiviral Particles: sc-39756-V and BMP-9 shRNA (m) Lentiviral Particles: sc-39757-V.

Positive Controls: BMP-9 (h2): 293T Lysate: sc-370246.

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 Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgG κ BP-FITC: sc-516140 or m-IgG κ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



BMP-9 (E-2): sc-515249. 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.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.