**BACKGROUND**

Bone morphogenic proteins (BMPs) are members of the TGFβ 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 TGFβ 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.

**CHROMOSOMAL LOCATION**

Genetic locus: BMP7 (human) mapping to 20q13.31; Bmp7 (mouse) mapping to 2H3.

**SOURCE**

BMP-7 (L-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of BMP-7 of human origin.

**PRODUCT**

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-9305 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

**APPLICATIONS**

BMP-7 (L-19) is recommended for detection of precursor and mature BMP-7 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg 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).

BMP-7 (L-19) is also recommended for detection of precursor and mature BMP-7 in additional species, including equine, bovine and porcine.

Suitable for use as control antibody for BMP-7 siRNA (h): sc-39748, BMP-7 siRNA (m): sc-39749, BMP-7 shRNA Plasmid (h): sc-39748-SH, BMP-7 shRNA Plasmid (m): sc-39749-SH, BMP-7 shRNA (h) Lentiviral Particles: sc-39749-V and BMP-7 shRNA (m) Lentiviral Particles: sc-39749-V.

Molecular Weight of BMP-7: 55 kDa.

Positive Controls: F9 cell lysate: sc-2245, MIA PaCa-2 cell lysate: sc-2285 or NTERA-2 cl.D1 whole cell lysate: sc-364181.

**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.

**DATA**

![Western blot analysis of BMP-7 expression in F9 whole cell lysate.](image)

**SELECT PRODUCT CITATIONS**


**Try BMP-7 (4E7): sc-53917, our highly recommended monoclonal alternative to BMP-7 (L-19).**