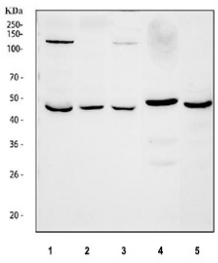
BMP4 Antibody / Bone morphogenetic protein 4 (R32828)

Catalog No.	Formulation	Size
R32828	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human, Mouse, Rat
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity
Buffer	Lyophilized from 1X PBS with 2% Trehalose
UniProt	P12644
Applications	Western Blot : 0.5-1ug/ml ELISA (Capture; Human Recombinant Protein) : 0.1-0.5ug/ml (BSA-free formulation available)
Limitations	This BMP4 antibody is available for research use only.



Western blot testing of 1) human HepG2, 2) human U-2 OS, 3) human Caco-2, 4) rat lung and 5) mouse lung tissue lysate with BMP4 antibody at 0.5ug/ml. Expected molecular weight: 54 kDa (precursor), 44 kDa (cleaved dimer), 23 kDa (cleaved monomer).

Description

Bone morphogenetic protein 4 (BMP4) is a member of the transforming growth factor-beta (TGF-beta) superfamily and plays a critical role in embryonic development, tissue formation, and cellular differentiation. It is particularly important in the regulation of bone and cartilage development, neural patterning, and organogenesis. BMP4 signaling occurs through binding to specific serine/threonine kinase receptors, activating SMAD transcription factors that regulate gene expression involved in growth and morphogenesis.

Dysregulation of BMP4 expression has been linked to developmental disorders, tumorigenesis, and abnormal tissue repair processes. In research settings, detection of BMP4 expression helps scientists study its roles in skeletal formation, vascular development, and cancer biology. Using a BMP4 antibody enables sensitive and specific detection of the protein in various assays, including western blot, immunohistochemistry, and ELISA.

A high-quality BMP4 antibody from NSJ Bioreagents can support studies exploring BMP4's role in cell differentiation, tissue engineering, and disease mechanisms. Additionally, selecting the right BMP4 antibody can help ensure reproducible results across different experimental platforms, aiding in both basic research and applied biomedical investigations.

Application Notes

Optimal dilution of the BMP4 antibody should be determined by the researcher.

Immunogen

A recombinant human protein corresponding to amino acids S293-R408 was used as the immunogen for the BMP4 antibody.

Storage

After reconstitution, the BMP4 antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.

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