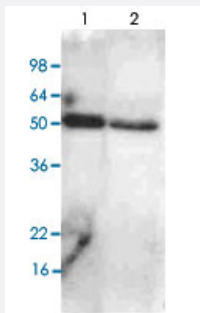


BMP7 monoclonal antibody, clone 4E7

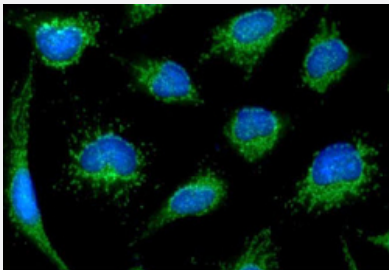
Catalog # MAB1073 Size 100 uL

Applications



Western Blot (Tissue lysate)

Western blot analysis of Lane 1: mouse kidney; Lane 2: rat heart lysate.



Immunocytochemistry

Immunocytochemistry analysis of HeLa cells. The cell was stained with BMP7 monoclonal antibody, clone 4E7 (Cat#MAB1073) (1:100). The secondary antibody (green) was used Alexa Fluor 488. DAPI was stained the cell nucleus (blue).

Specification

Product Description	Mouse monoclonal antibody raised against partial recombinant BMP7.
Immunogen	Recombinant protein corresponding to amino acids 293-431 of human BMP7.
Host	Mouse
Reactivity	Human, Mouse, Rat
Form	Liquid
Purification	Protein G purification
Isotype	IgG1, kappa

Recommend Usage	ELISA Immunocytochemistry Immunofluorescence Western Blot The optimal working dilution should be determined by the end user.
Storage Buffer	In PBS, pH 7.4 (10% glycerol, 0.02% sodium azide).
Storage Instruction	Store at 2°C to 8°C for 1 week. For long term storage, aliquot and store at -20°C to -80°C. Aliquot to avoid repeated freezing and thawing.
Note	This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

Applications

- Western Blot (Tissue lysate)

Western blot analysis of Lane 1: mouse kidney; Lane 2: rat heart lysate.

- Immunocytochemistry

Immunocytochemistry analysis of HeLa cells. The cell was stained with BMP7 monoclonal antibody, clone 4E7 (Cat#MAB1073) (1:100). The secondary antibody (green) was used Alexa Fluor 488. DAPI was stained the cell nucleus (blue).

- Immunofluorescence

- Enzyme-linked Immunoabsorbent Assay

Gene Info — BMP7

Entrez GeneID	655
GeneBank Accession#	NM_001719
Protein Accession#	NP_001710
Gene Name	BMP7
Gene Alias	OP-1
Gene Description	bone morphogenetic protein 7
Omim ID	112267
Gene Ontology	Hyperlink

Gene Summary

The bone morphogenetic proteins (BMPs) are a family of secreted signaling molecules that can induce ectopic bone growth. Many BMPs are part of the transforming growth factor-beta (TGFB) superfamily. BMPs were originally identified by an ability of demineralized bone extract to induce endochondral osteogenesis in vivo in an extraskeletal site. Based on its expression early in embryogenesis, the BMP encoded by this gene has a proposed role in early development and possible bone inductive activity. [provided by RefSeq]

Other Designations

OTTHUMP00000031357|osteogenic protein 1

Publication Reference

- [The prodomain of BMP-7 targets the BMP-7 complex to the extracellular matrix.](#)

Gregory KE, Ono RN, Charbonneau NL, Kuo CL, Keene DR, Bachinger HP, Sakai LY.

The Journal of Biological Chemistry 2005 Jul; 280(30):27970.

Application: ELISA, WB, Human, 293 cells, Culture medium collected from 293 cells

- [Structural basis of BMP signalling inhibition by the cystine knot protein Noggin.](#)

Groppe J, Greenwald J, Wiater E, Rodriguez-Leon J, Economides AN, Kwiatkowski W, Affolter M, Vale WW, Belmonte JC, Choe S.

Nature 2002 Dec; 420(6916):636.

- [Regulation of BMP7 expression during kidney development.](#)

Godin RE, Takaesu NT, Robertson EJ, Dudley AT.

Development 1998 Sep; 125(17):3473.

Pathway

- [Cytokine-cytokine receptor interaction](#)
- [Hedgehog signaling pathway](#)
- [TGF-beta signaling pathway](#)

Disease

- [Alzheimer disease](#)
- [Calcinosis](#)

- [Cardiovascular Diseases](#)
- [Cleft Lip](#)
- [Cleft Palate](#)
- [Depressive Disorder](#)
- [Diabetes Complications](#)
- [Diabetes Mellitus](#)
- [Diabetic Nephropathies](#)
- [Edema](#)
- [Genetic Predisposition to Disease](#)
- [Hyperparathyroidism](#)
- [Hypospadias](#)
- [Kidney Failure](#)
- [Metabolic Syndrome X](#)
- [Narcolepsy](#)
- [Neoplasms](#)
- [Obesity](#)
- [Osteoporosis](#)
- [Ovarian Failure](#)
- [Polycystic Ovary Syndrome](#)
- [Psychiatric Status Rating Scales](#)
- [Puberty](#)
- [Thrombophilia](#)
- [Tobacco Use Disorder](#)
- [Tooth Abnormalities](#)