

Rabbit Polyclonal Anti-BMP2 antibody BIOTIN

Catalog Number: BMP2-BIOTIN

Lot Number:

General Information

Product	BMP2 Antibody BIOTIN-Conjugated
Description	Bone morphogenetic protein 2 Antibody BIOTIN
Accession #	Uniprot: P21274 NCBI: NP_031579
Verified Applications	Dot blot, ELISA, WB, ICC/IF, IHC, IP, WB
Species Cross Reactivity	Human, Monkey, Mouse, Rat Predicted: Rabbit
Host	Rabbit
Immunogen	Synthetic peptide corresponding to Mouse BMP2 amino acid region 45-60 conjugated to Keyhole Limpet Haemocyanin (KLH).
Alternative Nomenclature	Sequence: SEDVLSEFELRLLSMF BDA2 antibody, BMP 2 antibody, BMP 2A antibody, Bone morphogenetic protein 2 antibody, Bone morphogenetic protein 2A antibody

Physical Properties

Quantity	100 µg
Volume	200 µl
Form	BIOTIN-Conjugated Immunoglobulins
Immunoglobulin & Concentration	0.73 mg/ml IgG in antibody stabilization buffer
Storage	Store at -20°C for long term storage.

Recommended Dilutions

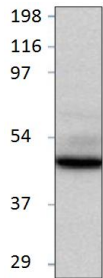
DOT Blot	1:2,000
ELISA	1:2,000
Immunocytochemistry	1:200
Immunofluorescence	1:200
Immunohistochemistry	1:200
Immunoprecipitation	1:200
Western Blot	1:500-1:,1000

Related Products

Catalog

Affinity Purified Unconjugated	BMP-201AP
FITC-Conjugated	BMP2-FITC
Antigenic Blocking Peptide	P-BMP2
Western Blot Positive Control	PC-BMP2

Application Verification:



WB of BMP-201AP with PC-BMP2. 1:500 antibody dilution in DiluObuffer.

Dilutions are for reference only. Applications not listed above are not necessarily precluded from working with this antibody. Investigators intending to use an application that has not been verified can request a complimentary sample.

Overview:

The transforming growth factor-beta (TGF-beta) super-family consists of a large number of growth and differentiation factors, such as TGF-betas, activins, inhibins, growth and differentiation factors (GDFs), and bone morphogenetic proteins (BMPs). These TGF beta ligands act through specific serine/threonine type I and Type II receptor kinases (1). These type I and II receptor kinases subsequently activate Smad proteins, which then propagate the signals into the nucleus to regulate target gene expression. So far twenty BMP's have been discovered through molecular cloning. Recombinant protein products from several of these clones (BMP2-BMP16) are members of the TGF-beta super-family of regulatory ligands. The bone morphogenetic proteins (BMP) are implicated in several inductive differentiation processes in vertebrate ontogeny and patterning of nervous system. Recently, these proteins have also emerged as candidates for regulating survival of mesencephalic dopaminergic and sympathetic neurons. It has been shown that several bone morphogenetic proteins are induced in 14 day developing embryonic rat dorsal root ganglia (2). BMPs exert survival promoting effects and positively modulate the effects of neurotrophins on sensory neurons (3). BMP2 transforms the human bone marrow-derived mesenchymal stem cells (MSCs) in to chondrocytic phenotype in high-density cultures (3). Recent studies suggest that BMP2 induced ectopic bone formation involves both endochondral and intramembranous ossification (4). Except for BMP-1, which is a metalloprotease, all other BMPs appears to be members of the TGF-beta regulatory molecules.

BMP2 is a 471 amino acid protein with an apparent MW of 58 kDa. The BMP2-selective antibodies were generated against peptides from unique regions of the BMP2 protein. These antibodies have been fully characterized for cross reactivity with other members of the bone morphogenetic proteins and other proteins. Antigenic blocking peptide and wesetern blot positive control for BMP2 antibodies are also available. Antibodies can be conjugated to secondary enzymes or fluorophores upon request at nominal charge. For a complete listing of all antibodies and lab services, please visit <http://fabgennix.com>.

References:

1. Peng C. J Obstet Gynaecol Can. 2003 Oct;25(10):834-44.
2. Farkas LM, Jaszai J, Unsicker K, Krieglstein K. Neuroscience. 1999;92(1):227-35
3. Schmitt B, Ringe J, Haupt T, Notter M, Manz R, Burmester GR, Sittinger M, Kaps C. Differentiation. 2003 Dec;71(9-10):567-577. Stoeger T, Proetzel GE, Welzel H, Papadimitriou A, Dony C, Balling R, Hofmann C.. Growth Factors. 2002 Dec;20(4):197-210.
4. Scott IC, Imamura Y, Pappano WN, Troedel JM, Recklies AD, Roughley PJ, Greenspan DS. J Biol Chem. 2000 ;275:30504-11

For users who may require large amounts of the products listed above, please inquire about bulk material discounts.
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