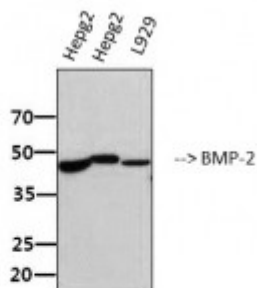


Anti-BMP-2 antibody



Western Blot (WB) analysis of 1. hepg2 & 2. L929 cells using BMP-2 Polyclonal Antibody. (STJ97346)



Description

BMP-2 is a protein encoded by the BMP2 gene which is approximately 44,7 kDa. BMP-2 is secreted into the extracellular space. It is involved in apoptotic pathways, PEDF induced signalling, the GPCR pathway and ERK signalling. This protein is a secreted ligand of the TGF-beta superfamily of proteins. It binds various TGF-beta receptors leading to recruitment and activation of SMAD family transcription factors that regulate gene expression. It is proteolytically processed to generate each subunit of the disulfide-linked homodimer, which plays a role in bone and cartilage development. BMP-2 is expressed in the bone, muscle, bone marrow, nervous system and lung. Mutations in the BMP2 gene may result in Cauda Equina syndrome. STJ97346 was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen. This polyclonal antibody detects endogenous levels of BMP-2 protein.

Model	STJ97346
Host	Rabbit
Reactivity	Human, Mouse, Rat
Applications	ELISA, IHC, WB
Immunogen	Synthesized peptide derived from human BMP-2.
Immunogen Region	341-390 aa, C-terminal
Gene ID	650
Gene Symbol	BMP2
Dilution range	WB 1:500-1:2000IHC-P 1:100-1:300ELISA 1:10000
Specificity	BMP-2 Polyclonal Antibody detects endogenous levels of BMP-2 protein.

Tissue Specificity	Particularly abundant in lung, spleen and colon and in low but significant levels in heart, brain, placenta, liver, skeletal muscle, kidney, pancreas, prostate, ovary and small intestine.
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Note	For Research Use Only (RUO).
Protein Name	Bone morphogenetic protein 2 BMP-2 Bone morphogenetic protein 2A BMP-2A
Clonality	Polyclonal
Conjugation	Unconjugated
Isotype	IgG
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Concentration	1 mg/ml
Storage Instruction	Store at -20°C, and avoid repeat freeze-thaw cycles.
Database Links	HGNC:1069OMIM:112261
Alternative Names	Bone morphogenetic protein 2 BMP-2 Bone morphogenetic protein 2A BMP-2A
Function	Induces cartilage and bone formation . Stimulates the differentiation of myoblasts into osteoblasts via the EIF2AK3-EIF2A- ATF4 pathway. BMP2 activation of EIF2AK3 stimulates phosphorylation of EIF2A which leads to increased expression of ATF4 which plays a central role in osteoblast differentiation. In addition stimulates TMEM119, which upregulates the expression of ATF4 .
Cellular Localization	Secreted.