

Rabbit Anti-BMP2 antibody

SL0514R

Product Name	BMP2
Chinese Name	骨形态发生蛋白 2 抗体
Alias	Bone morphogenetic protein 2; BMP 2; BMP 2A; BMP2A; BMP-2; BMP2_HUMAN.
Research Area	Cell biology immunology Developmental biology Neurobiology Growth factors and hormones
Immunogen Species	Rabbit
Clonality	Polyclonal
React Species	Human, (predicted: Mouse, Rat, Dog, Pig, Cow, Rabbit,) WB=1:500-2000
Applications	not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Theoretical molecular weight	13/44kDa
Cellular localization	Secretory protein
Form	Liquid
Concentration immunogen	1mg/ml Recombinant human BMP2
Lsotype	IgG
Purification	affinity purified by Protein A
Buffer Solution	1M TBS(pH7.4) with 1% BSA, 3% Proclin300 and 50% Glycerol.
Storage	Shipped at 4°C. Store at -20 °C for one year. Avoid repeated freeze/thaw cycles.
Attention	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
PubMed	PubMed
Product Detail	BMP2 belongs to the transforming growth factor-beta (TGFB) superfamily of secreted growth factors. It is a disulfide-linked homodimer and induces bone and cartilage formation. In addition to its osteogenic activity, BMP2 plays an

important role in cardiac morphogenesis and is expressed in a variety of tissues including lung, spleen, brain, liver, prostate ovary and small intestine. The functional form of BMP2 is a 26 kDa protein composed of two identical 114 amino acid polypeptide chains linked by a single disulfide bond. BMPs control fundamental events in early embryonic development, organogenesis and adult tissue homeostasis.

Function:

Induces cartilage and bone formation.

Subunit:

Homodimer; disulfide-linked. Interacts with SOSTDC1. Interacts with GREM2, RGMA, RGMB and RGMC. Interacts with ASPN.

Subcellular Location:

Secreted.

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.

Similarity:

Belongs to the TGF-beta family.

SWISS:

P12643

Gene ID:

650

Database links:

[Entrez Gene: 650](#) Human

[Entrez Gene: 12156](#) Mouse

[Entrez Gene: 29373](#) Rat

[Omim: 112261](#) Human

[SwissProt: P12643](#) Human

[SwissProt: P21274](#) Mouse

[SwissProt: P49001](#) Rat

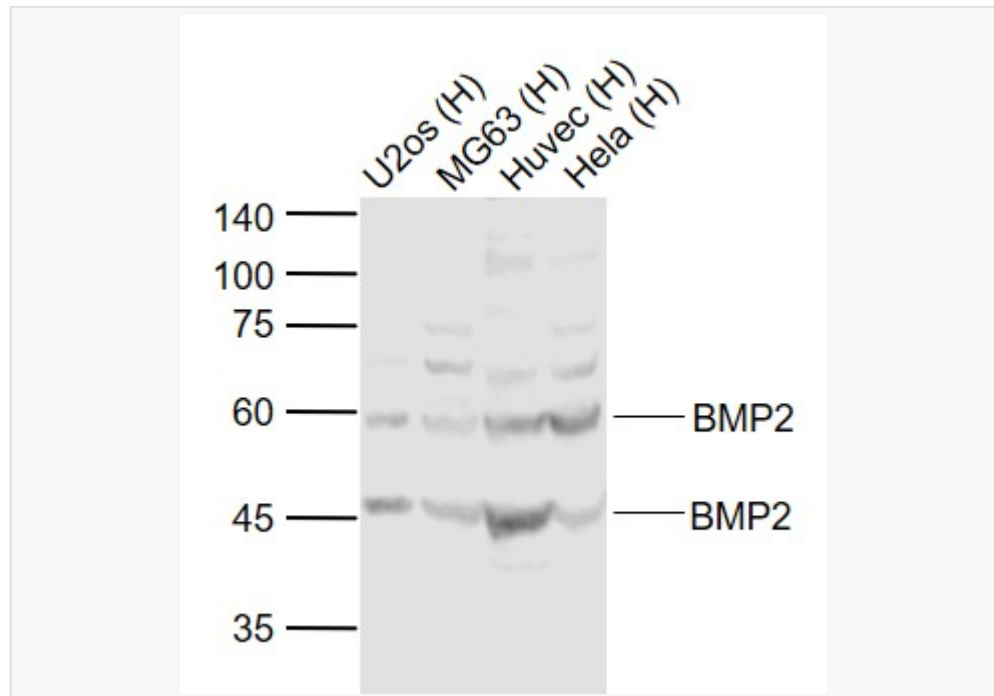
[Unigene: 73853](#) Human

[Unigene: 103205](#) Mouse

[Unigene: 90931](#) Rat

神经 Stem cellsMaker BMP-2 主要对未分化间充质细胞和骨系细胞起到募集和分化作用。在骨形成早期，BMP-2 不仅可使未分化间质细胞向骨形成中心募集，并分化为骨系细胞，而且可使成纤维细胞、成肌细胞及骨髓的基细胞逆转分化为骨系细胞。其主要过程是：增加或抑制这些细胞内的某些特异性蛋白的分泌，使成纤维 Cell differentiation 为成骨细胞，成肌细胞快速分化为肥大的软骨细胞，并促进基质钙化。对于成骨细胞，BMP-2 则可使之维持其特有细胞表型，并诱导成骨细胞 Maker 的增高，促进 Extracellular matrix 钙化。在骨形成后期，BMP-2 还作为一种破骨 Cell differentiation 因子与其它支持破骨 Cell differentiation 因子直接或间接刺激破骨 Cell differentiation，参与骨的重建。

Product Picture



Sample:

Lane 1: U2os (Human) Cell Lysate at 30 ug

Lane 2: MG63 (Human) Cell Lysate at 30 ug



Lane 3: Huvec (Human) Cell Lysate at 30 ug

Lane 4: Hela (Human) Cell Lysate at 30 ug

Primary: Anti-BMP2 (SL0514R) at 1/1000 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 60/45 kD

Observed band size: 60/45 kD