



Monoclonal Biotinylated Anti-human BMP-2 Antibody

ORDERING INFORMATION

Catalog Number: BAM3552

Clone: 100230

Lot Number: FZY03

Size: 250 µg

Formulation: 0.2 µm filtered solution in PBS with BSA

Storage: -20° C

Reconstitution: sterile PBS

Specificity: human BMP-2

Immunogen: CHO-derived rhBMP-2

Ig class: mouse IgG₁

Recommended Application:
ELISA detection

Background

BMP-2 is one of at least 15 structurally and functionally related BMPs, which are members of the transforming growth factor β (TGF- β) superfamily, BMPs were originally identified as protein regulators of cartilage and bone formation. However, they have since been shown to be involved in embryogenesis and morphogenesis of various tissues and organs.

Preparation

This antibody was produced from a hybridoma resulting from the fusion of a mouse myeloma with B cells obtained from a mouse immunized with purified, CHO-derived, recombinant human bone morphogenetic protein 2 (rhBMP-2; aa 283 - 296; Accession # P12643). The IgG fraction of the tissue culture supernatant was purified by Protein G affinity chromatography and then biotinylated.

Formulation

Lyophilized from a 0.2 µm filtered solution in phosphate-buffered saline (PBS) 50 µg bovine serum albumin per 1 µg of antibody.

Reconstitution

Reconstitute with sterile PBS. If 0.5 mL of PBS is used, the antibody concentration will be 500 µg/mL.

Storage

Lyophilized samples are stable for twelve months from date of receipt when stored at -20° C to -70° C. Upon reconstitution, the antibody can be stored at 2° - 8° C for 1 month without detectable loss of activity. Reconstituted antibody can also be aliquotted and stored frozen at -20° C to -70° C **in a manual defrost freezer** for six months without detectable loss of activity. **Avoid repeated freeze-thaw cycles.**

Specificity

This antibody detects rhBMP-2 in sandwich ELISAs. In this format, this antibody shows less than 10% cross-reactivity with rhBMP-4 and rhBMP-2/BMP-7 heterodimer and no cross-reactivity with rhBMP-3, -5, -6, rhTGF- β 1, rhTGF- β 2, or rhTGF- β 3.

Application

ELISA detection - This biotinylated antibody can be used as a detection reagent in a human BMP-2 sandwich immunoassay in combination with the human BMP-2 capture reagent (Cat. # MAB3551) and recombinant human BMP-2 (Cat. # 355-BM) as the standard. The suggested concentration range for this detection reagent is 0.5 - 2 µg/mL and should be titrated to determine the optimal concentration. A general protocol is provided at www.RnDSystems.com/go/MAPELISA.

Optimal dilutions should be determined by each laboratory for each application.