

DESCRIPTION

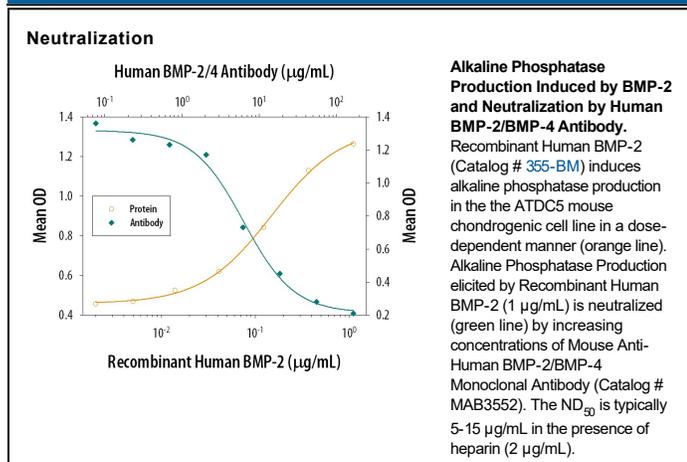
Species Reactivity	Human
Specificity	Detects human BMP-2 and human BMP-4 in direct ELISAs and Western blots. In direct ELISAs, 100% cross-reactivity with recombinant zebra fish (zrf) BMP-2 and rhBMP-4, 20%-40% cross-reactivity with rhBMP-3, -3b, -6, and no cross-reactivity with rhBMP-5, -7, -10, or -15 is observed.
Source	Monoclonal Mouse IgG ₁ Clone # 100230
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Chinese hamster ovary cell line CHO-derived recombinant human BMP-2 Gln283-Arg396 Accession # P12643
Endotoxin Level	<0.10 EU per 1 µg of the antibody by the LAL method.
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

	Recommended Concentration	Sample
Western Blot	1 µg/mL	Recombinant Human BMP-2 (Catalog # 355-BM) Recombinant Human BMP-4 (Catalog # 314-BP) under non-reducing conditions only
Neutralization		Measured by its ability to neutralize BMP-2-induced alkaline phosphatase production in the ATDC5 mouse chondrogenic cell line. Nakamura, K. <i>et al.</i> (1999) <i>Exp. Cell Res.</i> 250 :351. The Neutralization Dose (ND ₅₀) is typically 5-15 µg/mL in the presence of 1 µg/mL Recombinant Human BMP-2 and 2 µg/mL heparin. This antibody also neutralizes Human BMP-4 induced activity in the ATDC5 mouse chondrogenic cell line. The ND ₅₀ is approximately 3 µg/mL in the presence of 75 ng/mL of Recombinant Human BMP-4.

DATA



PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.5 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

Bone Morphogenetic Protein 2 (BMP-2) and BMP-4 are two 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.