

## DESCRIPTION

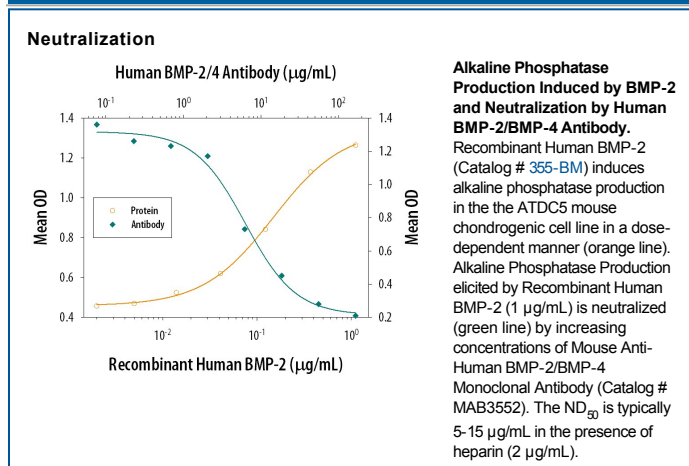
<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects human BMP-2 and human BMP-4 in direct ELISAs and Western blots. In direct ELISAs, 100% cross-reactivity with recombinant zebra fish (zrf) BMP-2 and rhBMP-4, 20%-40% cross-reactivity with rhBMP-3, -3b, -6, and no cross-reactivity with rhBMP-5,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

	<b>Recommended Concentration</b>	<b>Sample</b>
<b>Western Blot</b>	1 µg/mL	Recombinant Human BMP-2 (Catalog # 355-BM) Recombinant Human BMP-4 (Catalog # 314-BP) under non-reducing conditions only
<b>Neutralization</b>		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> <b>250</b> :351. The Neutralization Dose (ND <sub>50</sub> ) 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 <sub>50</sub> is approximately 3 µg/mL in the presence of 75 ng/mL of Recombinant Human BMP-4.

## DATA



## PREPARATION AND STORAGE

<b>Reconstitution</b>	Reconstitute at 0.5 mg/mL in sterile PBS.
<b>Shipping</b>	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
<b>Stability &amp; Storage</b>	<b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b> <ul style="list-style-type: none"> <li>● 12 months from date of receipt, -20 to -70 °C as supplied.</li> <li>● 1 month, 2 to 8 °C under sterile conditions after reconstitution.</li> <li>● 6 months, -20 to -70 °C under sterile conditions after reconstitution.</li> </ul>

## 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.