

DESCRIPTION

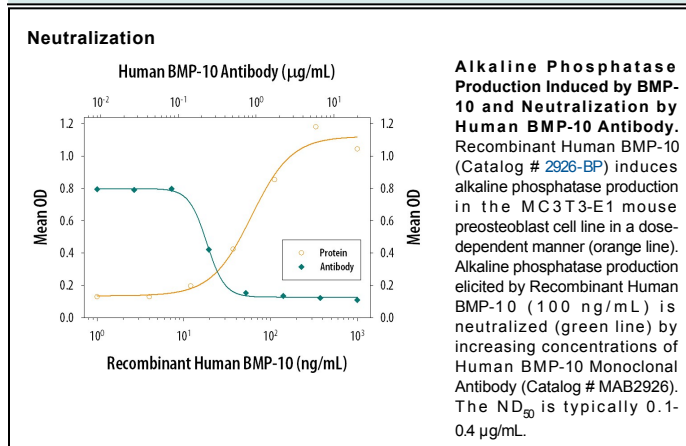
Species Reactivity	Human/Mouse
Specificity	Detects human BMP-10 in direct ELISAs and Western blots. In Western blots, no cross-reactivity with recombinant human (rh) BMP-1.1, 2, 3, 3b, 4, 5, 6, 7, 9, 15, or the pro region of rhBMP-10 is observed. In direct ELISAs, approximately 90% cross-reactivity with recombinant mouse BMP-10 is observed.
Source	Monoclonal Mouse IgG _{2A} Clone # 462732
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Chinese hamster ovary cell line CHO-derived recombinant human BMP-10 Asn317-Arg424 Accession # O95393
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 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-10 (Catalog # 2926-BP) under non-reducing conditions only
Neutralization		Measured by its ability to neutralize BMP-10-induced alkaline phosphatase production in the MC3T3-E1 mouse preosteoblast cell line. The Neutralization Dose (ND ₅₀) is typically 0.1-0.4 µg/mL in the presence of 100 ng/mL Recombinant Human BMP-10.

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 10 (BMP-10) is a TGF-β superfamily member whose expression is restricted to the developing and postnatal heart. It is synthesized as a 424 amino acid (aa) pre-protein with a putative 21 aa signal peptide, a 295 aa propeptide, and a 108 aa mature protein. Mature BMP-10 is secreted as a 25 kDa disulfide-linked homodimer. Mature human BMP-10 shares 98% aa sequence identity with mature mouse, and rat BMP-10.