

DESCRIPTION

Species Reactivity	Human
Specificity	Detects the pro region of the human BMP-2 precursor in direct ELISAs and Western blots. This antibody does not recognize mature recombinant human BMP-2.
Source	Monoclonal Mouse IgG _{2A} Clone # 253717
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Mouse myeloma cell line NS0-derived recombinant human BMP-2 Ala22-Lys281 (Arg245Ser, Arg279Ser) Accession # P12643
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-2 (Catalog # 355-BM)
Immunohistochemistry	8-25 µg/mL	Immersion fixed paraffin-embedded sections of human pancreatic cancer tissue

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

BMP-2, a member of the transforming growth factor beta (TGF-β) superfamily, is synthesized as an inactive precursor protein. The N-terminal pro region is removed via proteolytic cleavage to liberate a free 114 amino acid C-terminal fragment that forms a disulfide-linked active BMP-2 homodimer. BMP-2 modulates growth and differentiation of many cell types through its interaction with heterodimeric receptors composed of BMPR-II complexed with BMPR-IA or -IB.