

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human BMP-2/BMP-7 Heterodimer in direct ELISAs and Western blots. In direct ELISAs and Western blots, less than 5% cross-reactivity with recombinant human (rh) BMP-2 is observed, and no cross-reactivity with rhBMP-4/7, -4, -5, -6, -7, or -8 is observed.
Source	Monoclonal Mouse IgG ₁ Clone # 369505
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant human BMP-2/BMP-7 Heterodimer Ala284-Arg396 (BMP-2), Ser293-His431 (BMP-7) Accession # NP_001191, NP_001710
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/BMP-7 Heterodimer (Catalog # 3229-BM) under non-reducing conditions only

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 7 (BMP-7), also known as osteogenic protein 1 (OP-1), and BMP-2 are members of the BMP subgroup of the TGF-β superfamily and signal through heterodimeric complexes composed of type I and type II BMP receptors. After proteolytic removal of their propeptides, BMP-2 and BMP-7 can associate into 38 kDa disulfide-linked heterodimers. The heterodimers are significantly more potent than either homodimer in osteoblast differentiation and bone formation assays. Human and mouse BMP-2 and BMP-7 share 100% and 98% aa sequence identity, respectively.