

## DESCRIPTION

<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects human BMP-7 in ELISAs. In ELISAs, this antibody shows less than 0.125% cross-reactivity with recombinant human (rh) BMP-2, rhBMP-3, rhBMP-4, rhBMP-5, rhBMP-6, rhBMP-8, rhTGF- $\beta$ 1, rhTGF- $\beta$ 2, or rhTGF- $\beta$ 3.
<b>Source</b>	Monoclonal Mouse IgG <sub>1</sub> Clone # 164324
<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-7 Arg292-His431 Accession # P18075
<b>Formulation</b>	Lyophilized from a 0.2 $\mu$ m filtered solution in PBS with BSA as a carrier protein. See Certificate of Analysis for details.

## 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>Human BMP-7 Sandwich Immunoassay</b>		<b>Reagent</b>
<b>ELISA Capture</b>	2-8 $\mu$ g/mL	Human BMP-7 Antibody (Catalog # <a href="#">MAB3542</a> )
<b>ELISA Detection</b>	0.5-2.0 $\mu$ g/mL	Human BMP-7 Biotinylated Antibody (Catalog # <a href="#">BAM354</a> )
<b>Standard</b>		Recombinant Human BMP-7 (Catalog # <a href="#">354-BP</a> )

## 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.
<b>Stability &amp; Storage</b>	<p><b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b></p> <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

BMP-7, also known as Osteogenic Protein 1 (OP-1), is one of at least 15 structurally and functionally related BMPs, which are members of the TGF- $\beta$  superfamily. BMPs regulate cartilage and bone formation, embryogenesis and morphogenesis of various tissues and organs, and growth, differentiation, chemotaxis, and apoptosis of various cell types. Biologically active BMP-7 is a disulfide-linked homodimer. Cellular responses to BMP-7 have been shown to be mediated by the formation of hetero-oligomeric complexes of type I and type II serine/threonine kinase receptors.