

## DESCRIPTION

<b>Species Reactivity</b>	Mouse
<b>Specificity</b>	Detects mouse BMP-10 in direct ELISAs. In direct ELISAs, 100% cross-reactivity with recombinant human (rh) BMP-10 and less than 10% cross-reactivity with rhBMP-8a and recombinant mouse (rm) BMP-8b is observed. No cross-reactivity with rmBMP-3, -4, -5, -6, -7, -9, -15, rhBMP-1.1, -2, -3b, or the propeptide of rhBMP-10 is observed.
<b>Source</b>	Monoclonal Rat IgG <sub>2A</sub> Clone # 654319
<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-10 Asn314-Arg421 Accession # Q9R229
<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.

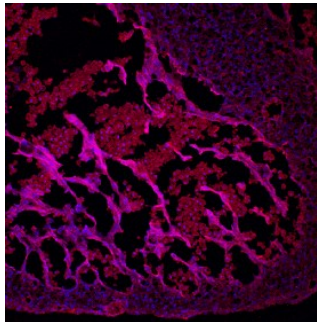
## APPLICATIONS

**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>Immunohistochemistry</b>	8-25 µg/mL	See Below

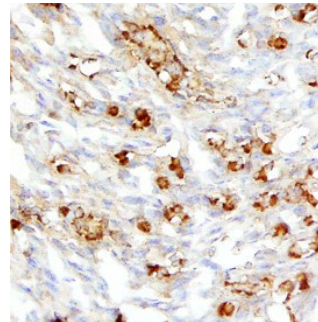
## DATA

### Immunohistochemistry



**BMP-10 in Mouse Embryonic Heart.** BMP-10 was detected in immersion fixed frozen sections of mouse embryonic heart (E13.5) using Rat Anti-Mouse BMP-10 Monoclonal Antibody (Catalog # MAB6038) at 10 µg/mL overnight at 4 °C. Tissue was stained using the NorthernLights™ 557-conjugated Anti-Rat IgG Secondary Antibody (red; Catalog # NL013) and counterstained with DAPI (blue). Specific staining was localized to developing myocardium. View our protocol for [Fluorescent IHC Staining of Frozen Tissue Sections](#).

### Immunohistochemistry



**BMP-10 in Mouse Embryonic Heart.** BMP-10 was detected in immersion fixed frozen sections of mouse embryonic heart (15 d.p.c.) using Rat Anti-Mouse BMP-10 Monoclonal Antibody (Catalog # MAB6038) at 25 µg/mL overnight at 4 °C. Tissue was stained using the Anti-Rat HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # CTS017) and counterstained with hematoxylin (blue). Specific staining was localized to developing heart. View our protocol for [Chromogenic IHC Staining of Frozen Tissue Sections](#).

## PREPARATION AND STORAGE

<b>Reconstitution</b>	Sterile PBS to a final concentration of 0.5 mg/mL.
<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 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-proprotein with a putative 21 aa signal peptide, a 292 aa propeptide, and a 108 aa mature protein. Mature BMP-10 is secreted as a 25 kDa disulfide-linked homodimer. The mouse BMP-10 proprotein shares 86% and 95% aa sequence identity with human and rat BMP-10, respectively.