**Species Reactivity**  
Human

**Specificity**  
Detects human Cardiac Troponin I in direct ELISAs and Western blots.

**Source**  
Monoclonal Mouse IgG2B Clone # 679013

**Purification**  
Protein A or G purified from hybridoma culture supernatant

**Immunogen**  
Human Cardiac Troponin I purified from human heart  
Accession # P19429

**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 either lyophilized or 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.

<table>
<thead>
<tr>
<th>Western Blot</th>
<th>Recommended Concentration</th>
<th>Sample</th>
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<tbody>
<tr>
<td></td>
<td>1 μg/mL</td>
<td>See Below</td>
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**DATA**

**Western Blot**  
Detection of Human Cardiac Troponin I by Western Blot.  
Western blot shows lysates of human heart tissue. PVDF membrane was probed with 1 μg/mL of Mouse Anti-Human Cardiac Troponin I Monoclonal Antibody (Catalog # MAB6887) followed by HRP-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # HAF007). Specific bands were detected for Cardiac Troponin I at approximately 24-29 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.

**PREPARATION AND STORAGE**

**Reconstitution**  
Sterile PBS to a final concentration of 0.5 mg/mL.

**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.  
- 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**

Troponin I, also known as TNI, is a 24-29 kDa component of a protein complex on striated muscle thin filaments. Troponin I inhibits the calcium-dependent muscle contraction mediated by Troponins C and T. The expression of cardiac Troponin I (TNNI3) is restricted to cardiac muscle, while TNNI1 and TNNI2 (encoded by distinct genes) are expressed in skeletal muscle. Mutations of cardiac Troponin I are associated with hereditary cardiomyopathy. Human cardiac Troponin I shares 93% amino acid sequence identity with mouse and rat cardiac Troponin I.