Human Troponin I Antibody

Monoclonal Mouse IgG_1 Clone # 679021

Catalog Number: MAB68871

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human Cardiac Troponin I in direct ELISAs and Western blots.
Source	Monoclonal Mouse IgG_1 Clone # 679021
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Human cardiac Troponin I purified from human heart
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.

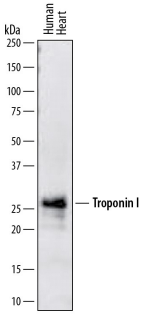
APPLICATIONS

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	See Below
Immunohistochemistry	8-25 µg/mL	See Below
Simple Western	10 µg/mL	See Below

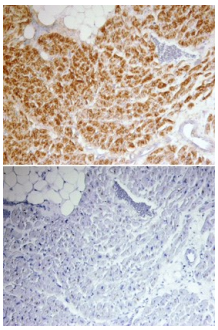
DATA

Western Blot



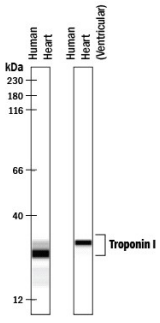
Detection of Human Troponin I by Western Blot. Western blot shows lysates of human heart tissue. PVDF membrane was probed with 1 µg/mL of Mouse Anti-Human Troponin I Monoclonal Antibody (Catalog # MAB68871) followed by HRP-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # HAF007). A specific band was detected for Troponin I at approximately 27 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.

Immunohistochemistry



Troponin I in Human Heart. Troponin I was detected in immersion fixed paraffin-embedded sections of human heart using Mouse Anti-Human Troponin I Monoclonal Antibody (Catalog # MAB68871) at 15 µg/mL overnight at 4 °C. Tissue was stained using the Anti-Mouse HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # CTS002) and counterstained with hematoxylin (blue). Lower panel shows a lack of labeling when primary antibodies are omitted and tissue is stained only with secondary antibody followed by incubation with detection reagents. Specific staining was localized to cardiac muscle. View our protocol for Chromogenic IHC Staining of Paraffin-embedded Tissue Sections.

Simple Western



Detection of Human Troponin I by Simple Western™. Simple Western lane view shows lysates of human heart tissue and human heart (ventricular) tissue, loaded at 0.5 mg/mL. Specific bands were detected for Troponin I at approximately 27-31 kDa (as indicated) using 10 µg/mL of Mouse Anti-Human Troponin I Monoclonal Antibody (Catalog # MAB68871). This experiment was conducted under reducing conditions and using the 12-230 kDa separation system.

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 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 heriditary cardiomyopathy. Human cardiac Troponin I shares 93% amino acid sequence identity with mouse and rat cardiac Troponin I.