

DESCRIPTION

Species Reactivity	Human/Mouse/Rat
Specificity	Detects human Troponin T in ELISA. Detects human, mouse, and rat Troponin T in Western blots.
Source	Monoclonal Mouse IgG _{2A} Clone # 990033
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Human Troponin T (Cardiac) antigen Accession # P45379
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.

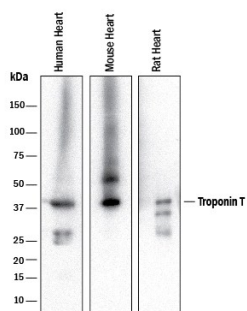
APPLICATIONS

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.

	Recommended Concentration	Sample
Western Blot	0.1 µg/mL	See Below
Immunohistochemistry	0.5-25 µg/mL	See Below
ELISA	This antibody functions as an ELISA detection antibody to detect human Troponin T (Cardiac) when paired with Mouse Anti-Human Troponin T (Cardiac) Monoclonal Antibody (Catalog # MAB18741). This product is intended for assay development on various assay platforms requiring antibody pairs.	

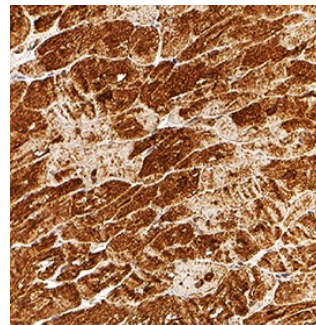
DATA

Western Blot



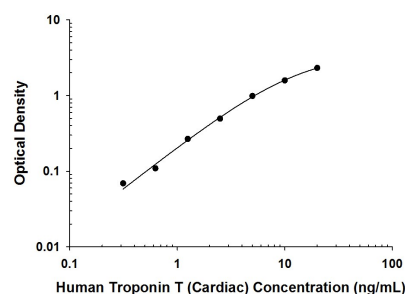
Detection of Human, Mouse, and Rat Troponin T by Western Blot. Western blot shows lysates of human heart tissue, mouse heart tissue, and rat heart tissue. PVDF membrane was probed with 0.1 µg/mL of Mouse Anti-Human/Mouse/Rat Troponin T (Cardiac) Monoclonal Antibody (Catalog # MAB18742) followed by HRP-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # HAF018). A specific band was detected for Troponin T at approximately 42 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.

Immunohistochemistry



Troponin T in Human Heart. Troponin T was detected in immersion fixed paraffin-embedded sections of human heart using Mouse Anti-Human/Mouse/Rat Troponin T (Cardiac) Monoclonal Antibody (Catalog # MAB18742) at 0.5 µg/mL for 1 hour at room temperature followed by incubation with the Anti-Mouse IgG VisUCyte™ HRP Polymer Antibody (Catalog # VC001). Tissue was stained using DAB (brown) and counterstained with hematoxylin (blue). Specific staining was localized to cytoplasm in cardiomyocytes. View our protocol for IHC Staining with VisUCyte HRP Polymer Detection Reagents.

ELISA



Human Troponin T (Cardiac) ELISA Standard Curve. Recombinant Human Troponin T protein was serially diluted 2-fold and captured by Mouse Anti-Human Troponin T (Cardiac) Monoclonal Antibody (Catalog # MAB18741) coated on a Clear Polystyrene Microplate (Catalog # DY990). Mouse Anti-Human/Mouse/Rat Troponin T (Cardiac) Monoclonal Antibody (Catalog # MAB18742) was biotinylated and incubated with the protein captured on the plate. Detection of the standard curve was achieved by incubating Streptavidin-HRP (Catalog # DY998) followed by Substrate Solution (Catalog # DY999) and stopping the enzymatic reaction with Stop Solution (Catalog # DY994).

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

Troponin T is one of three troponin isoforms found in the tropomyosin-troponin complex. This complex is responsible for the calcium sensitivity of the contractile apparatus in the muscle. Cardiac Troponin T is used as a biological marker for cardiomyocytes and its level in serum is frequently used as an indicator of myocardial cell injury.