

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human Troponin T(Cardiac) in direct ELISAs.
Source	Monoclonal Mouse IgG _{2A} Clone # 990007
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Human Cardiac Troponin T 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.

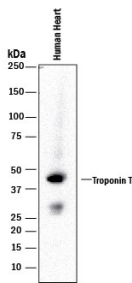
APPLICATIONS

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	1 µg/mL	See Below
Immunohistochemistry	0.5-25 µg/mL	See Below
ELISA	This antibody functions as an ELISA capture antibody when paired with Mouse Anti-Human Troponin T (Cardiac) Monoclonal Antibody (Catalog # MAB18742). <i>This product is intended for assay development on various assay platforms requiring antibody pairs.</i>	

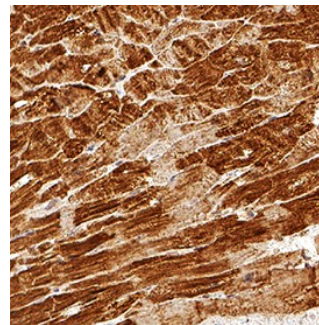
DATA

Western Blot



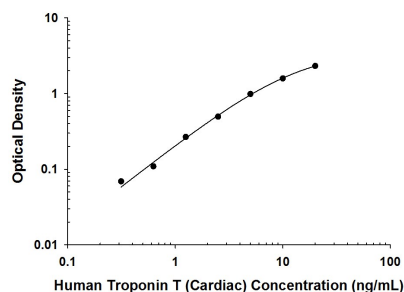
Detection of Human Troponin T by Western Blot. Western blot shows lysates of human heart tissue. PVDF membrane was probed with 1 µg/mL of Mouse Anti-Human Troponin T (Cardiac) Monoclonal Antibody (Catalog # [MAB18741](#)) followed by HRP-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # [HAF018](#)). 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 Troponin T (Cardiac) Monoclonal Antibody (Catalog # [MAB18741](#)) 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 of 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 (Cardiac) 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 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.

- 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.