

Rabbit anti-human cardiac Troponin I (cTnI) monoclonal antibody (clone 5A16)

Catalog Number: R15004MA16



General Information

Immunogen	Full length native human cTnI protein
IgG type	Rabbit IgG
Clonality	Monoclonal
Applications	ELISA, ITA
Pairing antibody	R15004MD11
Specificity	Human cTnI
Formulation	0.22 µM filtered solution of PBS, pH 7.4
Purity	> 95% determined by SDS-PAGE
Storage	≤ -20 °C for 1 year or 4 °C for 3 months

Abbreviations:

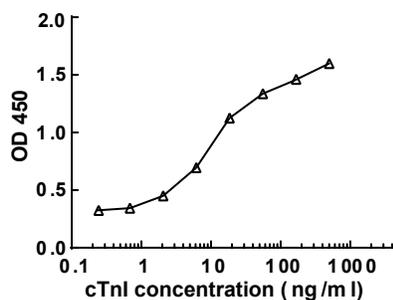
ELISA: Enzyme-linked immunosorbent assay; ITA: immunoturbidimetric assay; IP: immunoprecipitation; IHC: immuno-histochemistry; IF: immunofluorescence. WB: western blot;

Preparation

Monoclonal antibody is produced by immunizing rabbit with full length human cTnI and purified using protein A resin.

Application

Sandwich ELISA



ELISA conditions

- 1) capture antibody: rabbit anti-cTnI monoclonal antibody (clone 5D11, R15004MD11) at 1 µg/ml
- 2) detection antibody: rabbit anti-cTnI monoclonal antibody (clone 5A16, R15004MA16) at 0.5 µg/ml

Suggested pairs

Capture antibody	Detection antibody
R15004MB23, R15004MD11	R15004MA16

Storage

This antibody is shipped at 4 °C. This product is stable for 12 months from date of receipt when stored at -20 °C to -70 °C. Avoid freeze/thaw cycles.

Hazard/Biohazard

This antibody contains 0.09% sodium azide as preservative. Please handle and dispose the product properly. No known biohazard is associated with this product.

Background

Cardiac troponin I, cTnI, is exclusively expressed in cardiac muscle tissue in a single isoform with molecular weight ~24 KD. cTnI forms complex with cardiac Troponin T (cTnT) and Troponin C (TnC) to regulate the formation of actomyosin filament and subsequent cardiac muscle contraction. During cardiac muscle tissue injury, cTnI is released into the blood of patient and indicative of cardiac cell death. cTnI has been widely used as a sensitive and specific diagnostic marker of acute myocardial infarction (AMI), post-surgery myocardium trauma, chemotherapy cardiotoxicity, and some other diseases linked to cardiac muscle injury. In recent years, high-sensitivity cTnI assay has been used to accurately diagnose AMI after the onset of acute chest pain.

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