

## Basic Information

<b>Product Name</b>	Anti-Cardiac Troponin I/TNNI3 Antibody
<b>Gene Name</b>	TNNI3
<b>Source</b>	Rabbit
<b>Clonality</b>	Polyclonal
<b>Isotype</b>	IgG
<b>Species Reactivity</b>	mouse, rat
<b>Tested Application</b>	WB
<b>Contents</b>	500 ug/ml antibody with PBS, 0.02% NaN3, 1 mg/ml BSA and 50% glycerol.
<b>Immunogen</b>	A synthetic peptide corresponding to a sequence at the C-terminus of human Cardiac Troponin I/TNNI3, which shares 95.5% amino acid (aa) sequence identity with mouse and rat TNNI3.
<b>Concentration</b>	500 ug/ml
<b>Purification</b>	Immunogen affinity purified.
<b>Observed MW</b>	28 kDa
<b>Dilution Ratios</b>	Western blot (WB):1:500-2000

## Storage

12 months from date of receipt, -20°C as supplied.

## Background Information

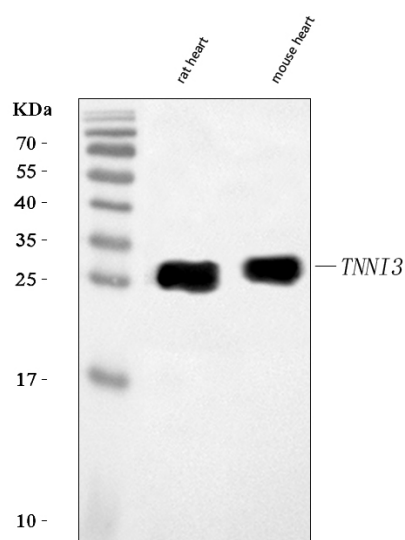
Troponin I, cardiac muscle is a protein that in humans is encoded by the TNNI3 gene. Troponin I (TnI), along with troponin T (TnT) and troponin C (TnC), is one of 3 subunits that form the troponin complex of the thin filaments of striated muscle. TnI is the inhibitory subunit; blocking actin-myosin interactions and thereby mediating striated muscle relaxation. The TnI subfamily contains three genes: TnI-skeletal-fast-twitch, TnI-skeletal-slow-twitch, and TnI-cardiac. This gene encodes the TnI-cardiac protein and is exclusively expressed in cardiac muscle tissues. Mutations in this gene cause familial hypertrophic cardiomyopathy type 7 (CMH7) and familial restrictive cardiomyopathy (RCM). Troponin I is useful in making a diagnosis of heart failure, and of ischemic heart disease. An elevated level of troponin is also now used as indicator of acute myocardial injury in patients hospitalized with moderate/severe Coronavirus Disease 2019 (COVID-19). Such elevation has also been associated with higher risk of mortality in cardiovascular disease patients

hospitalized due to COVID-19.

## Reference

Anti-Cardiac Troponin I/TNNI3 Antibody被引用在1文献中。

## Selected Validation Data



Western blot analysis of Cardiac Troponin I/TNNI3 using anti-Cardiac Troponin I/TNNI3 antibody (A01720-3). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: rat heart tissue lysates,

Lane 2: mouse heart tissue lysates.

After electrophoresis, proteins were transferred to a membrane.

Then the membrane was incubated with rabbit anti-Cardiac Troponin I/TNNI3 antigen affinity purified polyclonal antibody (A01720-3) at a dilution of 1:1000 and probed with a goat anti-rabbit IgG-HRP secondary antibody (Catalog # BA1054). The signal is developed using ECL Plus Western Blotting Substrate (Catalog # AR1197). A specific band was detected for Cardiac Troponin I/TNNI3 at approximately 28 kDa. The expected band size for Cardiac Troponin I/TNNI3 is at 24 kDa.