

A16730

Leader in Biomolecular Solutions for Life Science



# TTN Rabbit pAb

Catalog No.: A16730

## Basic Information

### Observed MW

Refer to figures

### Calculated MW

3816kDa

### Category

Polyclonal Antibody

### Applications

IF/ICC, ELISA

### Cross-Reactivity

Mouse, Rat

## Background

This gene encodes a large abundant protein of striated muscle. The product of this gene is divided into two regions, a N-terminal I-band and a C-terminal A-band. The I-band, which is the elastic part of the molecule, contains two regions of tandem immunoglobulin domains on either side of a PEVK region that is rich in proline, glutamate, valine and lysine. The A-band, which is thought to act as a protein-ruler, contains a mixture of immunoglobulin and fibronectin repeats, and possesses kinase activity. An N-terminal Z-disc region and a C-terminal M-line region bind to the Z-line and M-line of the sarcomere, respectively, so that a single titin molecule spans half the length of a sarcomere. Titin also contains binding sites for muscle associated proteins so it serves as an adhesion template for the assembly of contractile machinery in muscle cells. It has also been identified as a structural protein for chromosomes. Alternative splicing of this gene results in multiple transcript variants. Considerable variability exists in the I-band, the M-line and the Z-disc regions of titin. Variability in the I-band region contributes to the differences in elasticity of different titin isoforms and, therefore, to the differences in elasticity of different muscle types. Mutations in this gene are associated with familial hypertrophic cardiomyopathy 9, and autoantibodies to titin are produced in patients with the autoimmune disease scleroderma.

## Recommended Dilutions

IF/ICC 1:50 - 1:200

ELISA Recommended starting concentration is 1 µg/mL. Please optimize the concentration based on your specific assay requirements.

## Immunogen Information

### Gene ID

7273

### Swiss Prot

Q8WZ42

### Immunogen

Recombinant protein (or fragment). This information is considered to be commercially sensitive.

### Synonyms

TMD; CMH9; CMD1G; CMPD4; CMYP5; EOMFC; HMERF; MYLK5; SALMY; LGMD2J; LGMDR10; TTN

## Contact

 [www.abclonal.com](http://www.abclonal.com)

## Product Information

### Source

Rabbit

### Isotype

IgG

### Purification

Affinity purification

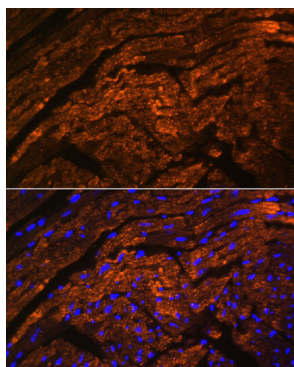
### Storage

Store at -20°C. Avoid freeze / thaw cycles.

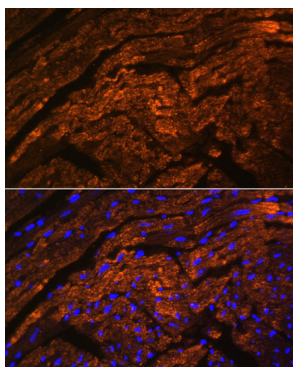
Buffer: PBS with 0.01% thimerosal, 50% glycerol, pH7.3.

## Validation Data

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Immunofluorescence analysis of paraffin-embedded rat heart using TTN Rabbit pAb (A16730) at dilution of 1:100. Secondary antibody: Cy3-conjugated Goat anti-Rabbit IgG (H+L) (AS007) at 1:500 dilution. Blue: DAPI for nuclear staining.



Immunofluorescence analysis of paraffin-embedded mouse heart using TTN Rabbit pAb (A16730) at dilution of 1:100. Secondary antibody: Cy3-conjugated Goat anti-Rabbit IgG (H+L) (AS007) at 1:500 dilution. Blue: DAPI for nuclear staining.