

Datasheet

TTN monoclonal antibody (M02), clone 2B3

Catalog Number: H00007273-M02

Regulatory Status: For research use only (RUO)

Product Description: Mouse monoclonal antibody raised against a partial recombinant TTN.

Clone Name: 2B3

Immunogen: TTN (AAH58824, 1 a.a. ~ 110 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.

Sequence:

MTTQAPTFTQPLQSVVVLEGSTATFEAHISGFPVPEVS
WFRDQQVISTSTLPGVQISFSDGRAKLTIPAVTKANSR
RYSLKATNGSGQATSTAELLVKAETAPPNFVQRL

Host: Mouse

Reactivity: Human

Applications: ELISA, IF, IHC-P, S-ELISA, WB-Re
(See our web site product page for detailed applications information)

Protocols: See our web site at
<http://www.abnova.com/support/protocols.asp> or product page for detailed protocols

Isotype: IgG1 Kappa

Storage Buffer: In 1x PBS, pH 7.4

Storage Instruction: Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.

Entrez GeneID: 7273

Gene Symbol: TTN

Gene Alias: CMD1G, CMH9, CMPD4, CONNECTIN, DKFZp451N061, EOMFC, FLJ26020, FLJ26409, FLJ32040, FLJ34413, FLJ39564, FLJ43066, HMERF, LGMD2J, TMD

Gene Summary: 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. A 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. 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. Of the many titin variants identified, five for which complete transcript information is available are described. Mutations in this gene are associated with familial hypertrophic cardiomyopathy 9 and autoantibodies to titin are produced in patients with the autoimmune disease scleroderma. [provided by RefSeq]

References:

1. Novel Mutation of the GNE Gene Presenting Atypical Mild Clinical Feature: A Korean Case Report . Choi YA, Park SH, Yi Y, Kim K. Ann Rehabil Med. 2015 Jun; 39(3):494-497.