

CAB16730

Product Information

Product SKU:	CAB16730	Gene ID:	7273	Size:	20uL, 100uL
Clone No:	-	Host Species:	Rabbit	Reactivity:	Mouse,Rat

Additional Information

Observed MW:	Refer to figures	Conjugate:	-
Calculated MW:	3816kDa	Isotype:	IgG

Immunogen Information

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 Dilution: IF/ICC, 1:50 - 1:200

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

Purification Method: Affinity purification

Immunogen: Recombinant fusion protein containing a sequence corresponding to amino acids 5347-5604 of human TTN (NP_596870.2).

Storage: Store at -20°C. Avoid freeze / thaw cycles. Buffer: PBS with 0.01% thimerosal, 50% glycerol, pH7.3.