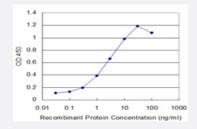


# TTN monoclonal antibody (M07), clone 2F12

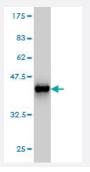
Catalog # H00007273-M07 Size 50 ug

## **Applications**



### Sandwich ELISA (Recombinant protein)

Detection limit for recombinant GST tagged TTN is approximately 0.03ng/ml as a capture antibody.



Western Blot detection against Immunogen (37.84 KDa).

Specification	
Product Description	Mouse monoclonal antibody raised against a partial recombinant TTN.
Immunogen	TTN (AAH58824, 1 a.a. ~ 110 a.a) partial recombinant protein with GST tag. MW of the GST tag alo ne is 26 KDa.
Sequence	MTTQAPTFTQPLQSVVVLEGSTATFEAHISGFPVPEVSWFRDGQVISTSTLPGVQISFSDGRAKLTI PAVTKANSGRYSLKATNGSGQATSTAELLVKAETAPPNFVQRL
Host	Mouse
Reactivity	Human



## **Product Information**

Interspecies Antigen Sequence	Mouse (93)
Isotype	lgG2b Kappa
Quality Control Testing	Antibody Reactive Against Recombinant Protein. Western Blot detection against Immunogen (37.84 KDa).
Storage Buffer	In 1x PBS, pH 7.4
Storage Instruction	Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.

# **Applications**

• Western Blot (Recombinant protein)

**Protocol Download** 

Sandwich ELISA (Recombinant protein)

Detection limit for recombinant GST tagged TTN is approximately 0.03ng/ml as a capture antibody.

**Protocol Download** 

ELISA

Gene Info — TTN	
Entrez GenelD	<u>7273</u>
GeneBank Accession#	BC058824
Protein Accession#	AAH58824
Gene Name	TTN
Gene Alias	CMD1G, CMH9, CMPD4, CONNECTIN, DKFZp451N061, EOMFC, FLJ26020, FLJ26409, FLJ3 2040, FLJ34413, FLJ39564, FLJ43066, HMERF, LGMD2J, TMD
Gene Description	titin
Omim ID	<u>188840 600334 603689 604145 608807</u>
Gene Ontology	<u>Hyperlink</u>



### **Product Information**

#### **Gene Summary**

This gene encodes a large abundant protein of striated muscle. The product of this gene is divide d into two regions, a N-terminal I-band and a C-terminal A-band. The I-band, which is the elastic p art of the molecule, contains two regions of tandem immunoglobulin domains on either side of a P EVK 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 k inase activity. A N-terminal Z-disc region and a C-terminal M-line region bind to the Z-line and M-li ne of the sarcomere respectively so that a single titin molecule spans half the length of a sarcomer e. Titin also contains binding sites for muscle associated proteins so it serves as an adhesion te mplate for the assembly of contractile machinery in muscle cells. It has also been identified as a st ructural 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 d ifferent 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 describ ed. Mutations in this gene are associated with familial hypertrophic cardiomyopathy 9 and autoant ibodies to titin are produced in patients with the autoimmune disease scleroderma. [provided by RefSeq

**Other Designations** 

rhabdomyosarcoma antigen MU-RMS-40.14

### **Publication Reference**

<u>Dramatic elevation in urinary amino terminal titin fragment excretion quantified by immunoassay in Duchenne</u>
 <u>muscular dystrophy patients and in dystrophin deficient rodents.</u>

Robertson AS, Majchrzak MJ, Smith CM, Gagnon RC, Devidze N, Banks GB, Little SC, Nabbie F, Bounous DI, DiPiero J, Jacobsen LK, Bristow LJ, Ahlijanian MK, Stimpson SA.

Neuromuscular Disorders: NMD 2017 May; 27(7):635.

Application: ELISA, Human, Urine from patients with Duchenne muscular dystrophy

Method For Diagnosing Muscular Dystrophy.

Jérémy Rouillon, Fedor Svinartchouk.

United States Patent Application Publication 2015 Aug; [Epub].

Application: ELISA, WB, Recombinant protein

## **Pathway**

Hypertrophic cardiomyopathy (HCM)

#### Disease

Cardiomyopathy



- Cardiovascular Diseases
- Diabetes Mellitus
- <u>Disease</u>
- Edema
- Genetic Predisposition to Disease