

Code No. 10423

Anti-Titin-N (53A1) Mouse IgG MoAb

Volume : 100 µg

Introduction : Titin (connectin) is a protein that consists of 34,350 amino-acid and specifically expresses in a cross-striated muscle. The molecular weight of human titin is 3,816 kDa and it has been known that as the largest protein among of existing proteins in a living body. It is one of sarcomere structured protein that is a minimum unit of myofibrillary protein and it has a role as an elastic protein for recovering the length of shortened sarcomere by its contraction. It has been known that titin is cleaved by proteolytic enzymes such as calpain and matrix metalloprotease if muscles are damaged. Titin N-Fragment, one of these fragments, is 26kDa N-terminus fragments which is excreted into the urine. It has been researched in the field of muscular dystrophy, sports medicine, cardiac disease, NAFLD, sarcopenia and frailty and it is considered as a molecule reflects status of muscles. This antibody can be used for ELISA to detect human urinary Titin N-Fragment.

Antigen	Recombinant Titin (1-200)	
Source	Mouse-Mouse hybridoma (X63-Ag8.653×BALB/c mouse spleen cells)	
Clone	53A1 Subclass : IgG1	
Purification	Affinity purified with ProteinA	
Form	Lyophilized product from in Dulbecco's-PBS	
How to use	0.1 mL deionized water will be added to the product, then its concentration come 1mg/mL	es to
Stability	Lyophilized product, 5 years at 2 – 8 $^{\circ}\mathrm{C}$ Solution, 2 years at –20 $^{\circ}\mathrm{C}$	
Application	ELISA	
Reference	Maruyama N, Asai T, Abe C, Inada A, Kawauchi T, Miyashita K, Maeda M,Matsuo M, Nabeshima Y. Establishment of a highly sensitive sandy ELISA for the N-terminal fragment of titin in urine. Sci Rep. 2016 Dec 19;6: 39	

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