

Code No. 10425

**Anti-Titin-N (144A2) Mouse IgG MoAb**Volume : 100 µg

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**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-Ag8.653xBALB/c mouse spleen cells)**Clone** : 144A2      **Subclass** : IgG<sub>2b</sub>**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 comes to 1mg/mL**Stability** : Lyophilized product, 5 years at 2 – 8 °C  
: Solution, 2 years at –20 °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 sandwich ELISA for the N-terminal fragment of titin in urine. Sci Rep. 2016 Dec 19;6: 39375