

Active Troponin T Type 2, Cardiac (TNNT2) Instruction Manual

SBPD337Hu01

Homo sapiens (Human)

Buffer Formulation

20mM Tris, 150mM NaCl, pH8.0, containing 1mM EDTA, 1mM DTT, 0.01% SKL, 5% Trehalose and Proclin300.

Traits

Freeze-dried powder

Purity

> 95%

Isoelectric Point

4.6

Applications

Cell culture; Activity Assays.

ACTIVITY TEST

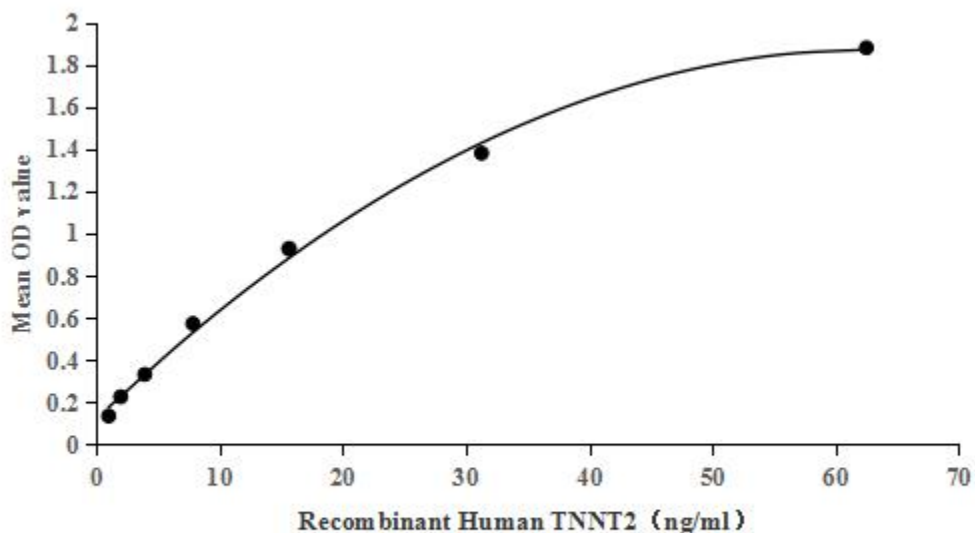


Figure 1. The binding activity of TNNT2 with TNNI3

Troponin T Type 2, Cardiac (TNNT2) is one of three troponin isoforms found in the tropomyosin-troponin complex. This complex is responsible for the calcium sensitivity of the contractile apparatus in the muscle. Cardiac Troponin T is used as a biological marker for cardiomyocytes and its level in serum is frequently used as an indicator of myocardial cell injury. Besides, Troponin I Type 3, Cardiac (TNNI3) has been identified as an interactor of TNNT2, thus a binding ELISA assay was conducted to detect the interaction of recombinant human TNNT2 and recombinant human TNNI3. Briefly, TNNT2 was

diluted serially in PBS with 0.01% BSA (pH 7.4). Duplicate samples of 100µl were then transferred to TNNT3-coated microtiter wells and incubated for 1h at 37°C. Wells were washed with PBST and incubated for 1h with anti-TNNT2 pAb, then aspirated and washed 3 times. After incubation with HRP labelled secondary antibody for 1h at 37°C, wells were aspirated and washed 5 times. With the addition of substrate solution, wells were incubated 15-25 minutes at 37°C. Finally, add 50µL stop solution to the wells and read at 450/630nm immediately. The binding activity of TNNT2 and TNNT3 was shown in Figure 1, and this effect was in a dose dependent manner.

USAGE

Reconstitute in 20mM Tris, 150mM NaCl (pH8.0) to a concentration of 0.1-1.0 mg/mL. Do not vortex.

STORAGE

Avoid repeated freeze/thaw cycles. Store at 2-8°C for one month. Aliquot and store at -80°C for 12 months.

STABILITY

The thermal stability is described by the loss rate. The loss rate was determined by accelerated thermal degradation test, that is, incubate the protein at 37°C for 48h, and no obvious degradation and precipitation were observed. The loss rate is less than 5% within the expiration date under appropriate storage condition.

Image

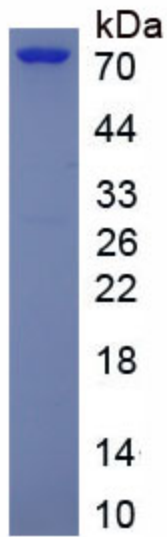


Figure. SDS-PAGE

[IMPORTANT NOTE]

The kit is designed for research use only, we will not be responsible for any issue if the kit was used in clinical diagnostic or any other procedures.