

# Active Cluster Of Differentiation 73 (CD73) Instruction Manual

## SBPB217Hu01

**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**

> 90%

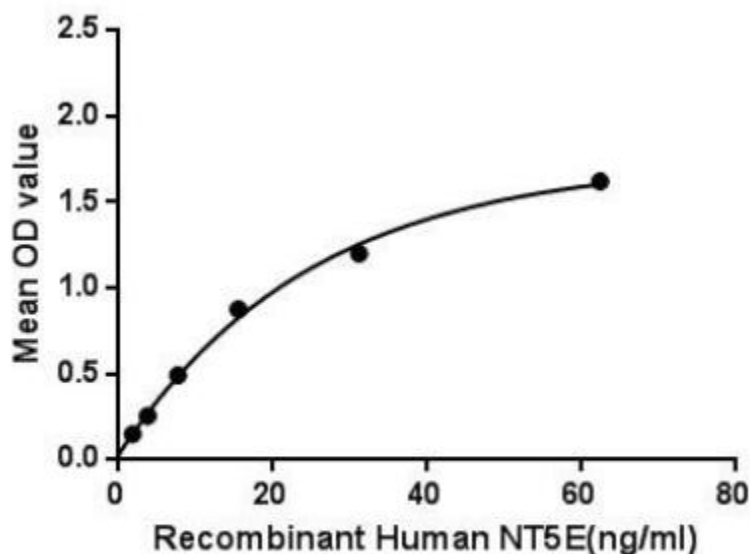
**Isoelectric Point**

6.4

**Applications**

Cell culture; Activity Assays.

### ACTIVITY TEST



**Figure 1. The binding activity of NT5E with AFF1**

5'-Nucleotidase, Ecto (NT5E), also known as ecto-5'-nucleotidase or CD73, is an enzyme catalyzing the hydrolysis of nucleoside-5'-monophosphates to nucleosides and inorganic phosphate. The enzyme is a dimer composed of 2 identical 70kD subunits bound by a glycosyl phosphatidyl inositol linkage to the external face of the plasma membrane. NT5E is a marker of lymphocyte differentiation that has functions independent of its catalytic activity, such as T-cell activation and cell-cell adhesion. Other forms of 5-prime nucleotidase exist in the cytoplasm and lysosomes and can be distinguished from NT5E by their substrate affinities, requirement for divalent magnesium ion, activation by ATP, and inhibition by inorganic phosphate. The enzyme is widely distributed in human and

animal tissues. Besides, AF4/FMR2 Family, Member 1 (AFF1) has been identified as an interactor of NT5E thus a binding ELISA assay was conducted to detect the interaction of recombinant human NT5E and recombinant human AFF1. Briefly, NT5E were diluted serially in PBS, with 0.01% BSA (pH 7.4). Duplicate samples of 100uL were then transferred to AFF1-coated microtiter wells and incubated for 2h at 37°C. Wells were washed with PBST and incubated for 1h with anti-NT5E pAb, then aspirated and washed 3 times. After incubation with HRP labelled secondary antibody, wells were aspirated and washed 3 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 450nm immediately. The binding activity of of NT5E and AFF1 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**

