

Human CD73 protein, His tag

Cat. No. GTX00159-pro

Applications Functional Assay**Species** Human**Package**

10 µg

Applications

Application Note

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 100 µl 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 50 µl stop solution to the wells and read at 450nm immediately. The binding activity of NT5E and AFF1 was in a dose dependent manner.

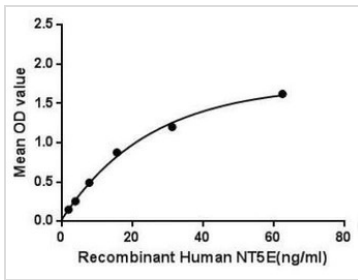
Observed MW (kDa) 53 kDa.

Properties

Form Lyophilized powder**Buffer** Reconstitute with 20mM Tris and 150mM NaCl to 0.1-1.0mg/ml. Do not vortex. Lyophilized from 20mM Tris, 150mM NaCl, 1mM EDTA, 1mM DTT, 0.01% SKL, 5% Trehalose.**Preservative** ProClin 300**Storage** For short-term storage (1-2 weeks), store at 4°C. For long-term storage, store at -20°C or below. After reconstitution, keep as concentrated solution. Avoid freeze-thaw cycles.**Region/Sequence** N-terminal His-Tag; Leu29~Thr500 (NP_001191742.1)**Expression System** E. coli**Purity** > 90%**Endotoxin** < 1 EU/µg**Conjugation** Unconjugated**Note** For laboratory use only. Not for any clinical, therapeutic, or diagnostic use in humans or animals. Not for animal or human consumption.

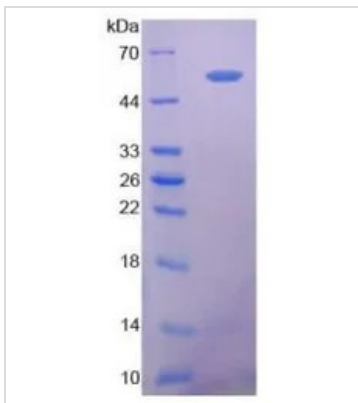
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DATA IMAGES



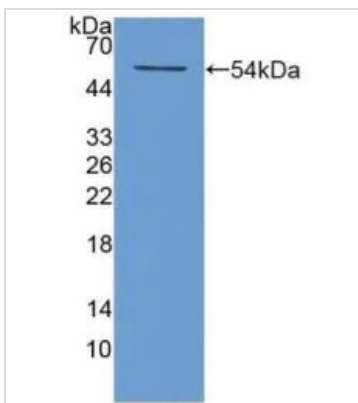
GTX00159-pro Functional Assay Image

Functional ELISA analysis of GTX00159-pro Human CD73 protein which can bind immobilized AFF1 protein.



GTX00159-pro Image

SDS-PAGE analysis of GTX00159-pro Human CD73 protein.



GTX00159-pro Image

WB analysis of GTX00159-pro Human CD73 protein.



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