

APB250Hu01 100µg

Active 5'-Nucleotidase, Ecto (NT5E)

Organism Species: Homo sapiens (Human)

Instruction manual

FOR IN VITRO USE AND RESEARCH USE ONLY
NOT FOR USE IN CLINICAL DIAGNOSTIC PROCEDURES

1th Edition (Apr, 2016)

[PROPERTIES]

Source: Prokaryotic expression.

Host: *E. coli*

Residues: Leu29~Thr500

Tags: N-terminal His-tag

Purity: >92%

Buffer Formulation: 20mM Tris, 150mM NaCl, pH8.0, containing 0.05% sarcosyl and 5% trehalose.

Applications: Cell culture; Activity Assays.

(May be suitable for use in other assays to be determined by the end user.)

Predicted isoelectric point: 6.4

Predicted Molecular Mass: 53.6kDa

Accurate Molecular Mass: 53kDa as determined by SDS-PAGE reducing conditions.

[USAGE]

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

[STORAGE AND STABILITY]

Storage: Avoid repeated freeze/thaw cycles.

Store at 2-8°C for one month.

Aliquot and store at -80°C for 12 months.

Stability Test: 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.

[SEQUENCE]

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LT ILHTNDVHSR LEQTSSESSK
CVNASRCMGG VARLFTKVQQ IRRRAEPNLL LDAGDQYQGT IWFTVYKGAE
VAHFMNALRY DAMALGNHEF DNGVEGLIEP LLKEAKFPIL SANIKAKGPL
ASQISGLYLP YKVLPGVDEV VGIVGYTSKE TPFLSNPGTN LVFEDEITAL
QPEVDKCLKL NVNKIIALGH SGFEMDKLIA QKVRGVDVVV GGHSNTFLYT
GNPPSKEVPA GKYPFIIVTSD DGRKVPVQA YAFGKYLGYL KIEFDERGNV
ISSHGNIILL NSSIPEDPSI KADINKWRIK LDNYSTQELG KTIVYLDGSS
QSCRFRFCNM GNLICDAMIN NNLRHTDEMFWNHVSMCILN GGGIRSPIDE
RNNGTITWEN LAAVLPFGGT FDLVQLKGST LKKAFEHSVH RYQSTGEFL
QVGGIHVVYD LSRKPGDRVV KLDVLCTKCR VPSYDPLKMD EVYKVILPNF
LANGGDGFQM IKDELLRHDS GDQDINVVST YISKMKVIYP AVEGRIKFST
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[ACTIVITY]

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

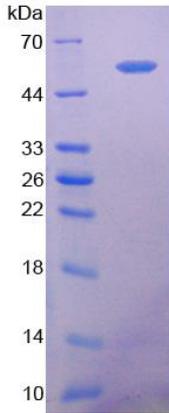


Figure 3. SDS-PAGE

Sample: Active recombinant NT5E, Human

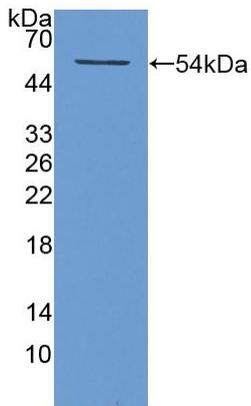


Figure 4. Western Blot

Sample: Recombinant NT5E, Human;

Antibody: Rabbit Anti-Human NT5E Ab (PAB250Hu01)