

NT5E Antibody
Purified Mouse Monoclonal Antibody
Catalog # AO1306a**Specification**

NT5E Antibody - Product Information

Application	IHC, E
Primary Accession	P21589
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Isotype	IgG1
Calculated MW	70kDa KDa

Description

5'-nucleotidase, ecto (NT5E), also known as CD73 (Cluster of Differentiation 73). Ecto-5-prime-nucleotidase (5-prime-ribonucleotide phosphohydrolase; EC 3.1.3.5) catalyzes the conversion at neutral pH of purine 5-prime mononucleotides to nucleosides, the preferred substrate being AMP. The enzyme consists of a dimer of 2 identical 70-kD subunits bound by a glycosyl phosphatidyl inositol linkage to the external face of the plasma membrane. The enzyme is used as a marker of lymphocyte differentiation. Consequently, a deficiency of NT5 occurs in a variety of immunodeficiency diseases (e.g., see MIM 102700, MIM 300300). Other forms of 5-prime nucleotidase exist in the cytoplasm and lysosomes and can be distinguished from ecto-NT5 by their substrate affinities, requirement for divalent magnesium ion, activation by ATP, and inhibition by inorganic phosphate.

Immunogen

Purified recombinant fragment of NT5E expressed in E. Coli.

Formulation

Ascitic fluid containing 0.03% sodium azide.

NT5E Antibody - Additional Information

Gene ID 4907

Other Names

5'-nucleotidase, 5'-NT, 3.1.3.5, Ecto-5'-nucleotidase, CD73, NT5E, NT5, NTE

Dilution

IHC~~1/200 - 1/1000

E~~N/A

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

NT5E Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

NT5E Antibody - Protein Information

Name NT5E

Synonyms NT5, NTE

Function

Catalyzes the hydrolysis of nucleotide monophosphates, releasing inorganic phosphate and the corresponding nucleoside, with AMP being the preferred substrate (PubMed:21933152, PubMed:22997138, PubMed:23142347, PubMed:24887587, PubMed:34403084). Shows a preference for ribonucleotide monophosphates over their equivalent deoxyribose forms (PubMed:34403084). Other substrates include IMP, UMP, GMP, CMP, dAMP, dCMP, dTMP, NAD and NMN (PubMed:21933152, PubMed:22997138, PubMed:23142347, PubMed:24887587, PubMed:34403084).

Cellular Location

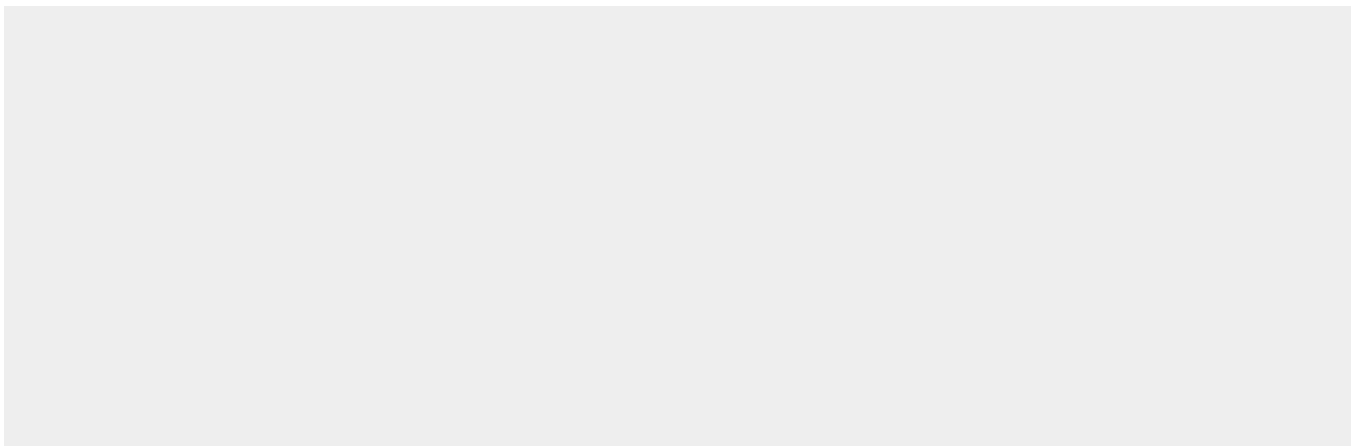
Cell membrane; Lipid-anchor, GPI-anchor

NT5E Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

NT5E Antibody - Images



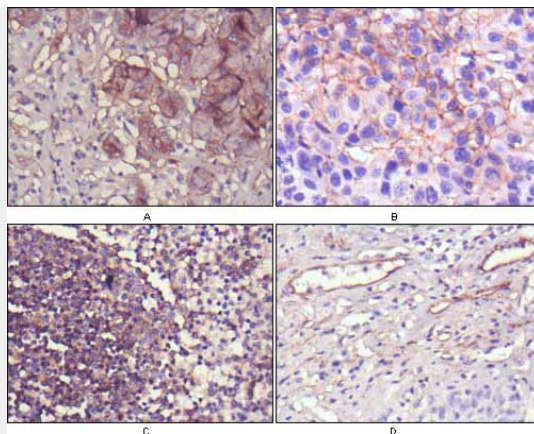


Figure 1: Immunohistochemical analysis of paraffin-embedded human lung cancer (A), cholangiocarcinoma (B), lymph node (C) and esophagus (D) tissues using NT5E mouse mAb with DAB staining.

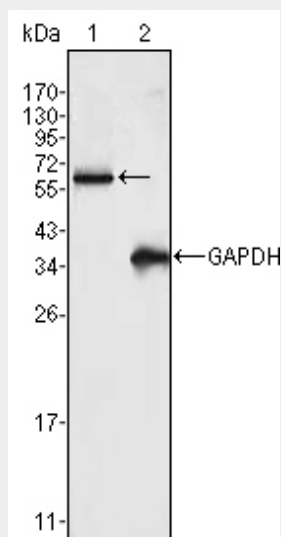


Figure 1: Western blot analysis using FRK mouse mAb against K562 cell lysate (1).

NT5E Antibody - References

1. Oncol Rep. 2007 Jun;17(6):1341-6.
2. Neurochem Int. 2003 Dec;43(7):621-8.