10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

NT5E Antibody

Purified Mouse Monoclonal Antibody
Catalog # AO1306a

Product Information

Application	IHC, E
Primary Accession	P21589
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Clone Names	1D7
Isotype	IgG1
Calculated MW	63368
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.

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.

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

References

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

Images

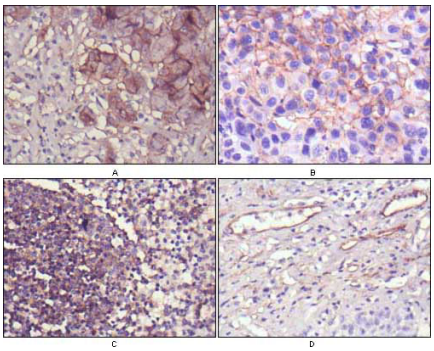


Figure 1: Immunohistochemical analysis of paraffin-embedded human lung cancer (A), cholangiocarcinorna (B), lymph node (C) and esophagus (D) tissues using NT5E mouse mAb with DAB staining.

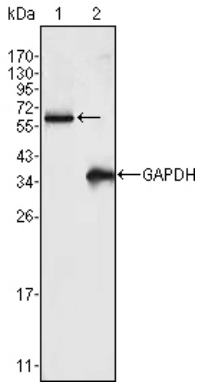


Figure 1: Western blot analysis using FRK mouse mAb against K562 cell lysate (1).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.