

NT5E Antibody

Purified Mouse Monoclonal Antibody

Catalog # AO1910a

Product Information

Application	WB, IHC, E
Primary Accession	P21589
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Clone Names	4G6B10
Isotype	IgG1
Calculated MW	63368
Description	The protein encoded by this gene is a plasma membrane protein that catalyzes the conversion of extracellular nucleotides to membrane-permeable nucleosides. The encoded protein is used as a determinant of lymphocyte differentiation. Defects in this gene can lead to the calcification of joints and arteries. Two transcript variants encoding different isoforms have been found for this gene.
Immunogen	Purified recombinant fragment of human NT5E (AA: 30-250) expressed in E. Coli.
Formulation	Purified antibody in PBS with 0.05% 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	WB~~1/500 - 1/2000 IHC~~1/200 - 1/1000 E~~1/10000
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

Background

This gene is a member of the solute carrier family 2 (facilitated glucose transporter) family and encodes a protein that functions as an insulin-regulated facilitative glucose transporter. In the absence of insulin, this integral membrane protein is sequestered within the cells of muscle and adipose tissue. Within minutes of insulin stimulation, the protein moves to the cell surface and begins to transport glucose across the cell membrane. Mutations in this gene have been associated with noninsulin-dependent diabetes mellitus (NIDDM). ; ;

References

1. Appl Immunohistochem Mol Morphol. 2012 Mar;20(2):103-7.
2. J Surg Oncol. 2012 Aug 1;106(2):130-7.

Images

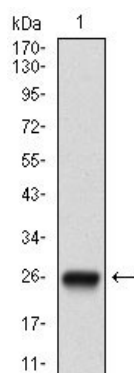


Figure 1: Western blot analysis using NT5E mAb against human NT5E (AA:) recombinant protein. (Expected MW is 26.6 kDa)

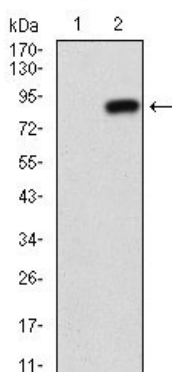


Figure 2: Western blot analysis using NT5E mAb against HEK293 (1) and NT5E (AA: 30-250)-hIgGFc transfected HEK293 (2) cell lysate.

Figure 3: Western blot analysis using NT5E mouse mAb against A431 (1) cell lysate.

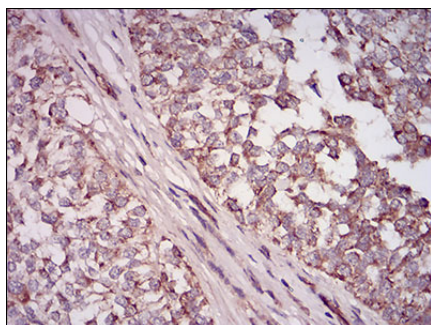
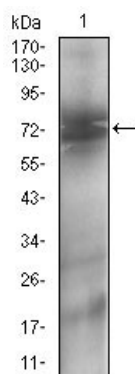


Figure 4: Immunohistochemical analysis of paraffin-embedded bladder cancer tissues using NT5E mouse mAb with DAB staining.

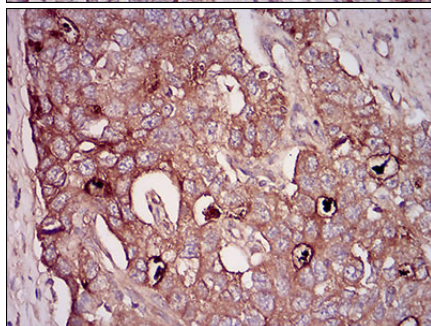


Figure 5: Immunohistochemical analysis of paraffin-embedded esophagus cancer tissues using NT5E mouse mAb with DAB staining.

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