

**NT5E Antibody**  
**Purified Mouse Monoclonal Antibody**  
**Catalog # AO1910a**

**Specification**

**NT5E Antibody - Product Information**

Application	<b>E, WB, IHC</b>
Primary Accession	<a href="#">P21589</a>
Reactivity	<b>Human</b>
Host	<b>Mouse</b>
Clonality	<b>Monoclonal</b>
Isotype	<b>IgG1</b>
Calculated MW	<b>63.4kDa KDa</b>

**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.

**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**

E~~1/10000  
WB~~1/500 - 1/2000  
IHC~~1/200 - 1/1000

**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:<a href="http://www.uniprot.org/citations/21933152" target="\_blank">21933152</a>, PubMed:<a href="http://www.uniprot.org/citations/22997138" target="\_blank">22997138</a>, PubMed:<a href="http://www.uniprot.org/citations/23142347" target="\_blank">23142347</a>, PubMed:<a href="http://www.uniprot.org/citations/24887587" target="\_blank">24887587</a>, PubMed:<a href="http://www.uniprot.org/citations/34403084" target="\_blank">34403084</a>). Shows a preference for ribonucleotide monophosphates over their equivalent deoxyribose forms (PubMed:<a href="http://www.uniprot.org/citations/34403084" target="\_blank">34403084</a>). Other substrates include IMP, UMP, GMP, CMP, dAMP, dCMP, dTMP, NAD and NMN (PubMed:<a href="http://www.uniprot.org/citations/21933152" target="\_blank">21933152</a>, PubMed:<a href="http://www.uniprot.org/citations/22997138" target="\_blank">22997138</a>, PubMed:<a href="http://www.uniprot.org/citations/23142347" target="\_blank">23142347</a>, PubMed:<a href="http://www.uniprot.org/citations/24887587" target="\_blank">24887587</a>, PubMed:<a href="http://www.uniprot.org/citations/34403084" target="\_blank">34403084</a>).

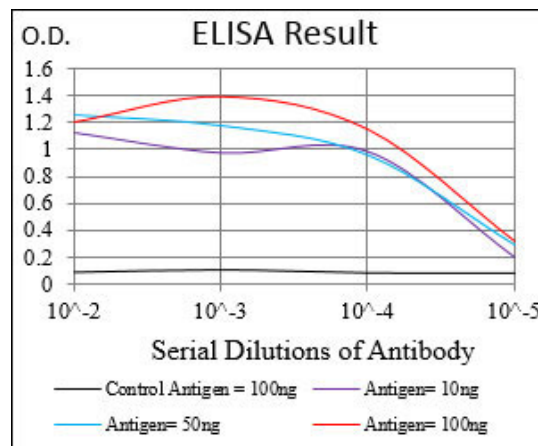
**Cellular Location**

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](#)



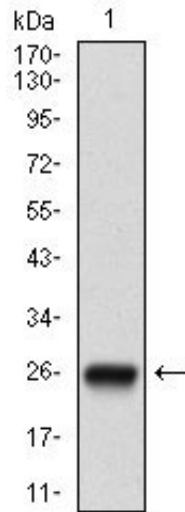


Figure 1: Western blot analysis using NT5E mAb against human NT5E (AA: ) recombinant protein. (Expected MW is 26.6 kDa)

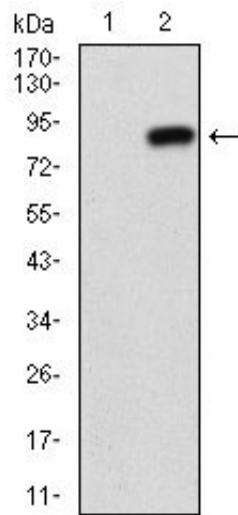


Figure 2: Western blot analysis using NT5E mAb against HEK293 (1) and NT5E (AA: 30-250)-hIgGfc transfected HEK293 (2) cell lysate.

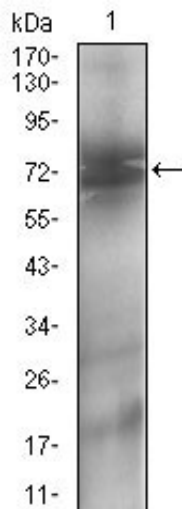


Figure 3: Western blot analysis using NT5E mouse mAb against A431 (1) cell lysate.

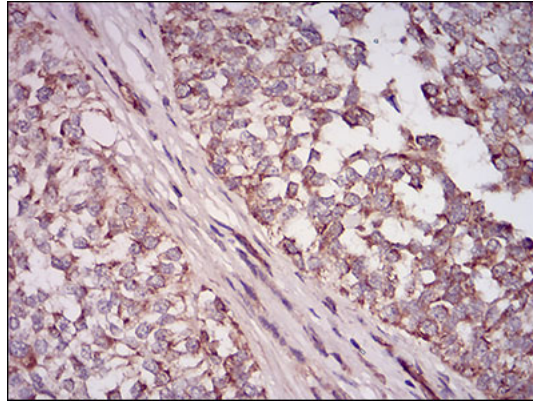


Figure 4: Immunohistochemical analysis of paraffin-embedded bladder cancer tissues using NT5E mouse mAb with DAB staining.

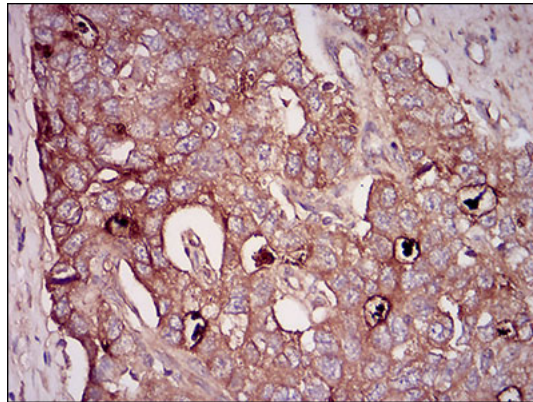


Figure 5: Immunohistochemical analysis of paraffin-embedded esophagus cancer tissues using NT5E mouse mAb with DAB staining.

### **NT5E Antibody - 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). ; ;

### **NT5E Antibody - References**

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