

# CD73 (NT5E) Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP2014A

### **Product Information**

**Application** IHC-P, E **Primary Accession** P21589 Reactivity Human Host Rabbit Clonality Polyclonal Isotype Rabbit IgG **Calculated MW** 63368 **Antigen Region** 1-30

## **Additional Information**

**Gene ID** 4907

Other Names 5'-nucleotidase, 5'-NT, Ecto-5'-nucleotidase, CD73, NT5E, NT5, NTE

**Target/Specificity** This CD73 (NT5E) antibody is generated from rabbits immunized with a KLH

conjugated synthetic peptide between 1-30 amino acids from the N-terminal

region of human CD73 (NT5E).

**Dilution** IHC-P~~1:100~500 E~~Use at an assay dependent concentration.

**Format** Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide.

This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation

followed by dialysis against PBS.

**Storage** Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store

at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions** CD73 (NT5E) Antibody (N-term) 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:<u>21933152</u>, PubMed:<u>22997138</u>, PubMed:<u>23142347</u>, PubMed:<u>24887587</u>, PubMed:<u>34403084</u>). 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

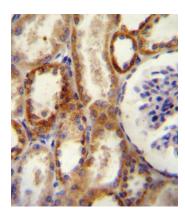
# **Background**

Ecto-5-prime-nucleotidase catalyzes conversion at neutral pH of purine 5-prime mononucleotides to nucleosides. The enzyme consists of a dimer of 2 identical 70 kD subunits tethered by a glycosyl phosphatidyl inositol moeity to the exterior plasma membrane surface. The enzyme, a marker of lymphocyte differentiation is associated in deficiency with a variety of immunodeficiency diseases. The preferred substrate is AMP. The NT5 gene has been localized to 6q14-q21 by immunofluorescence and a study of a panel of human x mouse hybrids that contained fragments of chromosome 6 as translocations.

#### References

Hashikawa, T., et al., J. Dent. Res. 82(11):888-892 (2003). Rosi, F., et al., Biomed. Pharmacother. 56(2):100-104 (2002). Misumi, Y., et al., Eur. J. Biochem. 191(3):563-569 (1990). Boyle, J.M., et al., Hum. Genet. 81(1):88-92 (1988). Kalsi, K., et al., Mol. Cell. Biochem. 232 (1-2), 113-119 (2002).

# **Images**



CD73 (NT5E) Antibody (N-term) (Cat. #AP2014a)immunohistochemistry analysis in formalin fixed and paraffin embedded human kidney tissue followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of CD73 (NT5E) Antibody (N-term) for immunohistochemistry. Clinical relevance has not been evaluated.

## **Citations**

- <u>Umbilical cord mesenchymal stromal cells affected by gestational diabetes mellitus display premature aging and mitochondrial dysfunction.</u>
- CD73 is a phenotypic marker of effector memory Th17 cells in inflammatory bowel disease.
- Ecto-5'-nucleotidase/CD73 knockdown increases cell migration and mRNA level of collagen I in a hepatic stellate cell line.
- Expression of dopamine-associated genes on conjunctiva stromal-derived human mesenchymal stem cells.

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