

For Research Use Only

# NT5E/CD73 Polyclonal antibody

Catalog Number: 12231-1-AP

Featured Product

41 Publications



## Basic Information

**Catalog Number:**

12231-1-AP

**Size:**

350 µg/ml

**Source:**

Rabbit

**Isotype:**

IgG

**Immunogen Catalog Number:**

AG2869

**GenBank Accession Number:**

BC015940

**GeneID (NCBI):**

4907

**UNIPROT ID:**

P21589

**Full Name:**

5'-nucleotidase, ecto (CD73)

**Calculated MW:**

29 kDa, 63 kDa

**Observed MW:**

63-70 kDa

**Purification Method:**

Antigen affinity purification

**Recommended Dilutions:**

WB 1:1000-1:3000

IHC 1:250-1:1000

IF 1:50-1:500

## Applications

**Tested Applications:**

FC, IF-P, IHC, WB, ELISA

**Cited Applications:**

WB, IF, FC, IHC, ELISA

**Species Specificity:**

human, mouse, rat

**Cited Species:**

human, rat, mouse, Bovine

**Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0**

**Positive Controls:**

**WB:** A375 cells, human spleen tissue, K-562 cells, mouse brain tissue, HT-29 cells, HuH-7 cells, Jurkat cells

**IHC:** human lung cancer tissue, human stomach cancer tissue, human stomach tissue, mouse kidney tissue, human colon cancer tissue

**IF:** mouse small intestine tissue,

## Background Information

NT5E(5'-nucleotidase) is also named as NT5, NTE, CD73, ecto-5'-nucleotidase, and belongs to the 5'-nucleotidase family. It catalyzes the conversion at neutral pH of purine 5-prime mononucleotides to nucleosides, the preferred substrate being AMP. The enzyme occurs mainly as a dimer and the wide distribution of NT5E in the rat hippocampus, suggesting their involvement in the control of the purinergic signaling (PMID:17619139). This protein has two isoforms with the molecular weight of 63 kDa and 58 kDa and four glycosylation sites with a signal peptide. It can exist as a dimer (PMID:17619139). It can be detected the band of 55 kDa, 64 kDa, 70 kDa, 110 kDa by western blot (PMID:17619139; 12370277; 21533188). Defects in NT5E are the cause of calcification of joints and arteries (CALJA).

## Notable Publications

Author	Pubmed ID	Journal	Application
Xue Wu	36330907	Int Immunopharmacol	WB, IHC
Xuxin Chen	30362554	J Cell Physiol	FC
Wengeng Lu	34746277	Front Vet Sci	IF

## Storage

**Storage:**

Store at -20°C. Stable for one year after shipment.

**Storage Buffer:**

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

For technical support and original validation data for this product please contact:

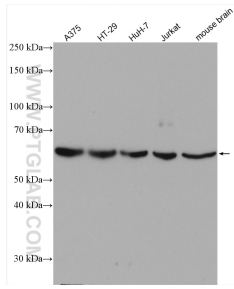
T: 4006900926

E: Proteintech-CN@ptglab.com

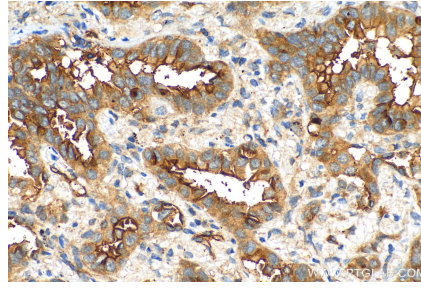
W: ptgcn.com

**This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.**

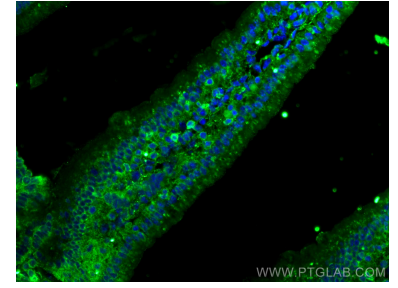
## Selected Validation Data



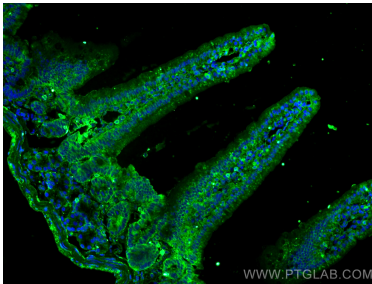
Various lysates were subjected to SDS PAGE followed by western blot with 12231-1-AP (NT5E/CD73 antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours.



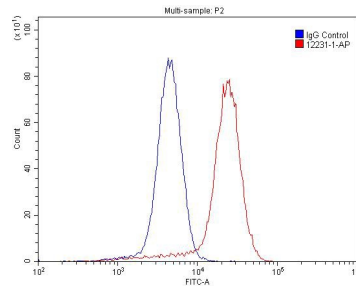
Immunohistochemical analysis of paraffin-embedded human lung cancer tissue slide using 12231-1-AP (NT5E/CD73 antibody) at dilution of 1:500 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed mouse small intestine tissue using NT5E/CD73 antibody (12231-1-AP) at dilution of 1:200 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



Immunofluorescent analysis of (4% PFA) fixed mouse small intestine tissue using NT5E/CD73 antibody (12231-1-AP) at dilution of 1:200 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



1x10<sup>6</sup> NCCIT cell were stained with 0.2ug NT5E/CD73 antibody (12231-1-AP, red) and control antibody (blue). Fixed with 4% PFA blocked with 3% BSA (30 min). Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) with dilution 1:1500.