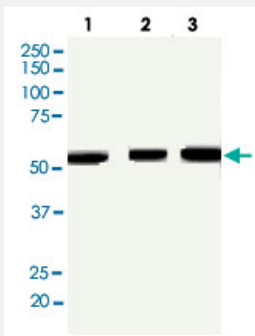


NT5E monoclonal antibody, clone AT89E9

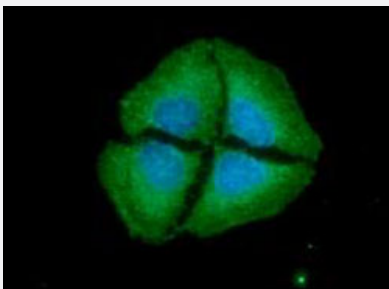
Catalog # MAB1114 Size 100 uL

Applications



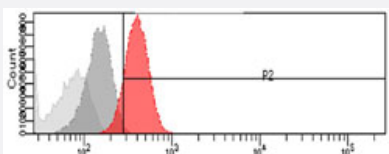
Western Blot (Cell lysate)

Western blot analysis of Lane 1: HepG2 cell lysate, Lane 2: WiDr cell lysate, Lane 3: A431 cell lysate.



Immunofluorescence

Immunofluorescence analysis of HeLa cells. The cell was stained with NT5E monoclonal antibody, clone AT89E9 (1:100). The secondary antibody (green) was used Alexa Fluor 488. DAPI was stained the cell nucleus (blue).



Flow Cytometry

Flow cytometric analysis of A-431 cells. The cell was stained with NT5E monoclonal antibody, clone AT89E9 at 2-5 ug for 1x10⁶ cells (red). A Goat anti mouse IgG (Alexa fluor 488) was used as the secondary antibody. Mouse monoclonal IgG was used as the isotype control (dark gray), cells without incubation with primary and secondary antibody was used as the negative control (light gray).

Specification

Product Description

Mouse monoclonal antibody raised against partial recombinant NT5E.

Immunogen	Recombinant protein corresponding to amino acids 27-252 of human NT5E.
Host	Mouse
Reactivity	Human
Form	Liquid
Purification	Protein G purification
Isotype	IgG2b, kappa
Recommend Usage	ELISA Flow Cytometry Immunocytochemistry Immunofluorescence Western Blot The optimal working dilution should be determined by the end user.
Storage Buffer	In PBS, pH 7.4 (10% glycerol, 0.02% sodium azide).
Storage Instruction	Store at 2°C to 8°C for 1 week. For long term storage, aliquot and store at -20°C to -80°C. Aliquot to avoid repeated freezing and thawing.
Note	This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

Applications

- Western Blot (Cell lysate)

Western blot analysis of Lane 1: HepG2 cell lysate, Lane 2: WiDr cell lysate, Lane 3: A431 cell lysate.

- Immunocytochemistry

- Immunofluorescence

Immunofluorescence analysis of HeLa cells. The cell was stained with NT5E monoclonal antibody, clone AT89E9 (1:100). The secondary antibody (green) was used Alexa Fluor 488. DAPI was stained the cell nucleus (blue).

- Enzyme-linked Immunoabsorbent Assay

- Flow Cytometry

Flow cytometric analysis of A-431 cells. The cell was stained with NT5E monoclonal antibody, clone AT89E9 at 2-5 ug for 1×10^6 cells (red). A Goat anti mouse IgG (Alexa fluor 488) was used as the secondary antibody. Mouse monoclonal IgG was used as the isotype control (dark gray), cells without incubation with primary and secondary antibody was used as the negative control (light gray).

Gene Info — NT5E

Entrez GeneID [4907](#)

GeneBank Accession# [NM_002526](#)

Protein Accession# [NP_002517](#)

Gene Name NT5E

Gene Alias CD73, E5NT, NT, NT5, NTE, eN, eNT

Gene Description 5'-nucleotidase, ecto (CD73)

Omim ID [129190](#)

Gene Ontology [Hyperlink](#)

Gene Summary 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.[supplied by OMIM]

Other Designations 5' nucleotidase (CD73)|5' nucleotidase, ecto|OTTHUMP00000016808|OTTHUMP00000040565|Purine 5-Prime-Nucleotidase|ecto-5'-nucleotidase

Publication Reference

- [Physiological roles for ecto-5'-nucleotidase \(CD73\).](#)

Colgan SP, Eltzschig HK, Eckle T, Thompson LF.

Purinergic Signalling 2006 Jun; 2(2):351.

Application: Flow Cyt, Mouse , Mouse smooth muscle cells

- [Crucial role for ecto-5'-nucleotidase \(CD73\) in vascular leakage during hypoxia.](#)

Thompson LF, Eltzschig HK, Ibla JC, Van De Wiele CJ, Resta R, Morote-Garcia JC, Colgan SP.

The Journal of Experimental Medicine 2004 Dec; 200(11):1395.

Application: Flow Cyt, Mouse, Mouse leukocytes

- [Differential regulation and function of CD73, a glycosyl-phosphatidylinositol-linked 70-kD adhesion molecule, on lymphocytes and endothelial cells.](#)

Airas L, Niemela J, Salmi M, Puurunen T, Smith DJ, Jalkanen S.

The Journal of Cell Biology 1997 Jan; 136(2):421.

Application: Dot, Flow Cyt, IF, IP, Human, HEC cells, HUVECs, Lymphocytes

Pathway

- [Biosynthesis of alkaloids derived from histidine and purine](#)
- [Metabolic pathways](#)
- [Nicotinate and nicotinamide metabolism](#)
- [Purine metabolism](#)
- [Pyrimidine metabolism](#)

Disease

- [Ataxia telangiectasia](#)
- [Colorectal Neoplasms](#)
- [Depressive Disorder](#)
- [Fatigue](#)
- [Genetic Predisposition to Disease](#)
- [Ovarian Neoplasms](#)
- [Sleep Disorders](#)
- [Sleep Initiation and Maintenance Disorders](#)