

Rabbit anti-Mouse, Rat CD73/Nt5e Polyclonal Antibody | anti-Nt5e antibody

Anti-CD73/Nt5e Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA125634	Rabbit	Mouse, Rat	ELISA, Flow Cytometry, Functional Assay, Immunohistochemistry, Western Blot

PRODUCT SYNONYMS

CD73/Nt5e; Polyclonal Antibody; Anti-CD73/Nt5e Antibody; 5'-nucleotidase; 5'-NT; Ecto-5'-nucleotidase; CD antigen CD73; Nt5e; Nt5; Nte; 5' nucleotidase; ecto; anti-Nt5e antibody

PRODUCT SPECIFICATIONS

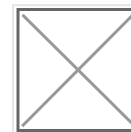
Host	Rabbit
Reactivity	Mouse, Rat
Clonality	Polyclonal
Isotype	Rabbit IgG
Specificity	Rabbit IgG polyclonal antibody for CD73/Nt5e detection.
Purity/Purification	Immunogen affinity purified.
Form/Format	Lyophilized. Each vial contains 4mg Trehalose, 0.9mg NaCl, 0.2mg Na2HPO4, 0.01mg NaN3.
Applicable Applications for anti-Nt5e antibody	ELISA (Direct ELISA), FCM/FACS (Flow Cytometry), IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	E Coli-derived mouse CD73/Nt5e recombinant protein (Position: S337-S551).
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.
Recommended Detection Systems	Recommended Detection Systems
Preparation and Storage	Store at -20 degree C for one year. After reconstitution, at 4 degree C for one month. It can also be aliquotted and stored frozen at -20 degree C for a longer time. Avoid repeated freezing and thawing.

IMAGES



FCM/FACS (Flow Cytometry)

Figure 4. Flow Cytometry analysis of mouse spleen tissue using anti-CD73/Nt5e antibody (AAA125634). Overlay histogram showing mouse spleen tissue stained with AAA125634 (Blue line). The tissue was blocked with 10% normal goat serum. And then incubated with rabbit anti-CD73/Nt5e Antibody (AAA125634, 1μg/1x106 cells) for 30 min at 20 degree C. DyLight®488 conjugated goat anti-rabbit IgG (5-10μg/1x106 cells) was used as secondary antibody for 30 minutes at 20 degree C. Isotype control antibody (Green line) was rabbit IgG (1μg/1x106) used under the same conditions. Unlabelled sample (Red line) was also used as a control.



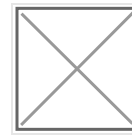
FCM/FACS (Flow Cytometry)

Figure 3. Flow Cytometry analysis of mouse spleen tissue using anti-CD73/Nt5e antibody (AAA125634). Overlay histogram showing mouse spleen tissue stained with AAA125634 (Blue line). The tissue was blocked with 10% normal goat serum. And then incubated with rabbit anti-CD73/Nt5e Antibody (AAA125634, 1μg/1x106 cells) for 30 min at 20 degree C. DyLight®488 conjugated goat anti-rabbit IgG (5-10μg/1x106 cells) was used as secondary antibody for 30 minutes at 20 degree C. Isotype control antibody (Green line) was rabbit IgG (1μg/1x106) used under the same conditions. Unlabelled sample (Red line) was also used as a control.



IHC (Immunohistochemistry)

Figure 2. IHC analysis of CD73/Nt5e using anti-CD73/Nt5e antibody (AAA125634). CD73/Nt5e was detected in paraffin-embedded section of mouse spleen tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1 µg/ml rabbit anti-CD73/Nt5e Antibody (AAA125634) overnight at 4 degree C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) with DAB as the chromogen.



WB (Western Blot)

Figure 1. Western blot analysis of CD73/Nt5e using anti-CD73/Nt5e antibody (AAA125634). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50 µg of sample under reducing conditions. Lane 1: rat PC-12 whole cell lysates Lane 2: rat C6 whole cell lysates Lane 3: rat RH35 whole cell lysates Lane 4: mouse thymus tissue lysates. After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-CD73/Nt5e antigen affinity purified polyclonal antibody (Catalog # AAA125634) at 0.5 µg/mL overnight at 4 degree C, then washed with TBS-0.1% Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:5000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for CD73/Nt5e at approximately 63KD. The expected band size for CD73/Nt5e is at 63KD.

ADDITIONAL INFORMATION

Related Product Information for anti-Nt5e antibody	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.
References	- Boyle, J. M., Hey, Y., Fox, M. Human ecto-5-prime nucleotidase maps to chromosome 6q14-q21. (Abstract) Cytogenet. Cell Genet. 51: 968 only, 1989. - Castrop, H., Huang, Y., Hashimoto, S., Mizel, D., Hansen, P., Theilig, F., Bachmann, S., Deng, C., Briggs, J., Schnermann, J. Impairment of tubuloglomerular feedback regulation of GFR in ecto-5-prime-nucleotidase/CD73-deficient mice. J. Clin. Invest. 114: 634-642, 2004. - St. Hilaire, C., Ziegler, S. G., Markello, T. C., Brusco, A., Groden, C., Gill, F., Carlson-Donohoe, H., Lederman, R. J., Chen, M. Y., Yang, D., Siegenthaler, M. P., Arduino, C., and 9 others. NT5E mutations and arterial calcifications. New Eng. J. Med. 364: 432-442, 2011.

NCBI AND UNIPROT INFORMATION

NCBI GI #	13431280
NCBI GeneID	23959
UniProt Accession #	Q61503; Q3U3S1
Molecular Weight	63,864 Da
NCBI Official Full Name	5'-nucleotidase
NCBI Official Synonym Full Names	5' nucleotidase, ecto
NCBI Official Symbol	Nt5e
NCBI Official Synonym Symbols	NT; Nt5; eNT; CD73; 5'-NT; AI447961; 2210401F01Rik
NCBI Protein Information	5'-nucleotidase
UniProt Protein Name	5'-nucleotidase
UniProt Gene Name	Nt5e
UniProt Synonym Gene Names	Nt5; Nte; 5'-NT

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.