

Rabbit anti-Mouse, Rat CD39/Entpd1 Polyclonal Antibody | anti-CD39/Entpd1 antibody

Anti-CD39/Entpd1 Antibody Picoband

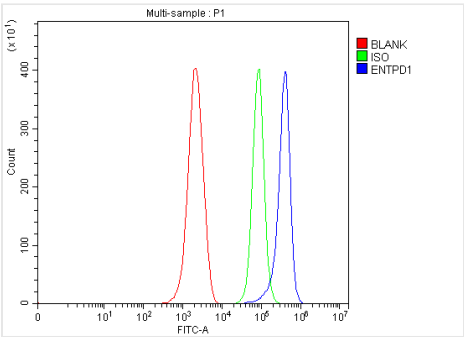
CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA127167	Rabbit	Mouse, Rat	ELISA, Flow Cytometry, Functional Assay, Immunohistochemistry, Western Blot

PRODUCT SYNONYMS

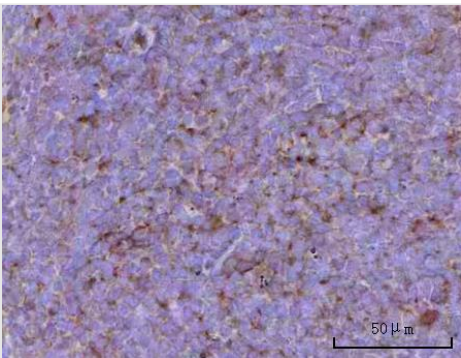
CD39/Entpd1; Polyclonal Antibody; Anti-CD39/Entpd1 Antibody Picoband; Rapamycin-insensitive companion of mTOR; RPTOR independent companion of MTOR complex 2 ; AVO3 homolog; hAVO3; RICTOR; KIAA1999; anti-CD39/Entpd1 antibody

PRODUCT SPECIFICATIONS

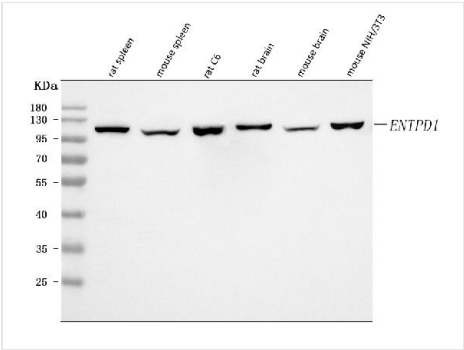
Host	Rabbit
Reactivity	Mouse, Rat
Clonality	Polyclonal
Isotype	Rabbit IgG
Specificity	In fetal tissues, it is highly expressed in heart, lung liver and kidney, and weakly expressed in brain. In adult, it is highly expressed in pancreas, spleen, thymus and peripheral blood leukocytes, expressed at moderate levels in heart, placenta, lung, liver, skeletal muscle, kidney, prostate, ovary, small intestine and colon, and weakly expressed in brain and testis.
Purity/Purification	Immunogen affinity purified.
Form/Format	Lyophilized. Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na ₂ HPO ₄ .
Applicable Applications for anti-CD39/Entpd1 antibody	ELISA, FCM/FACS (Flow Cytometry), IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	E coli-derived mouse CD39/Entpd1 recombinant protein (Position: Q39-S475).
Subcellular Localization	Cytosol. TORC2 complex
Reconstitution	Adding 0.2 ml of distilled water will yield a concentration of 500ug/ml.
Cross Reactivity	No cross-reactivity with other proteins.
Protein Function	Subunit of mTORC2, which regulates cell growth and survival in response to hormonal signals. mTORC2 is activated by growth factors, but, in contrast to mTORC1, seems to be nutrient-insensitive. mTORC2 seems to function upstream of Rho GTPases to regulate the actin cytoskeleton, probably by activating one or more Rho-type guanine nucleotide exchange factors. mTORC2 promotes the serum-induced formation of stress-fibers or F-actin. mTORC2 plays a critical role in AKT1 'Ser-473' phosphorylation, which may facilitate the phosphorylation of the activation loop of AKT1 on 'Thr-308' by PDK1 which is a prerequisite for full activation. mTORC2 regulates the phosphorylation of SGK1 at 'Ser-422'. mTORC2 also modulates the phosphorylation of PRKCA on 'Ser-657'. Plays an essential role in embryonic growth and development.
Preparation and Storage	At -20 degree C for one year from date of receipt. After reconstitution, at 4 degree C for one month. It can also be aliquotted and stored frozen at -20 degree C for six months. Avoid repeated freezing and thawing.



FCM/FACS (Flow Cytometry)
Figure 3. Flow Cytometry analysis of ANA-1 cells using anti-CD39/Entpd1 antibody (AAA127167).Overlay histogram showing ANA-1 cells stained with AAA127167 (Blue line). The cells were fixed with 4% paraformaldehyde and blocked with 10% normal goat serum. And then incubated with rabbit anti-CD39/Entpd1 Antibody (AAA127167, 1ug/1x10⁶ cells) for 30 min at 20 degree C. DyLight488 conjugated goat anti-rabbit IgG was used as secondary antibody for 30 minutes at 20 degree C. Isotype control antibody (Green line) was rabbit IgG (1ug/1x10⁶) used under the same conditions. Unlabelled sample without incubation with primary antibody and secondary antibody (Red line) was used as a blank control.



IHC (Immunohistochemistry)
Figure 2. IHC analysis of CD39/Entpd1 using anti-CD39/Entpd1 antibody (AAA127167).CD39/Entpd1 was detected in a paraffin-embedded section of rat spleen tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2ug/ml rabbit anti-CD39/Entpd1 Antibody (AAA127167) overnight at 4 degree C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit with DAB as the chromogen.



WB (Western Blot)
Figure 1. Western blot analysis of CD39/Entpd1 using anti-CD39/Entpd1 antibody (AAA127167).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 30 ug of sample under reducing conditions.Lane 1: rat spleen tissue lysates,Lane 2: mouse spleen tissue lysates,Lane 3: rat C6 whole cell lysates,Lane 4: rat brain tissue lysates,Lane 5: mouse brain tissue lysates,Lane 6: mouse NIH/3T3 whole cell lysates.After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA 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-CD39/Entpd1 antigen affinity purified polyclonal antibody (#AAA127167) at 0.25ug/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 CD39/Entpd1 at approximately 100 kDa. The expected band size for CD39/Entpd1 is at 58 kDa.

ADDITIONAL INFORMATION

Related Product Information for anti-CD39/Entpd1 antibody	The brand Picoband indicates this is a premium antibody that guarantees superior quality, high affinity, and strong signals with minimal background in Western blot applications. Only our best-performing antibodies are designated as Picoband, ensuring unmatched performance.
Product Categories/Family for anti-CD39/Entpd1 antibody	Primary Antibodies; Signal Transduction

References	1. Adrian, K., Bernhard, M. K., Breiterger, H.-G., Ogilvie, A. Expression of purinergic receptors (ionotropic P2X1-7 and metabotropic P2Y1-11) during myeloid differentiation of HL60 cells. <i>Biochim. Biophys. Acta</i> 1492: 127-138, 2000. 2. Badimon, A., Strasburger, H. J., Ayata, P., Chen, X., Nair, A., Ikegami, A., Hwang, P., Chan, A. T., Graves, S. M., Uweru, J. O., Ledderose, C., Kutlu, M. G., and 18 others. Negative feedback control of neuronal activity by microglia. <i>Nature</i> 586: 417-423, 2020. 3. Chadwick, B. P., Frischauf, A.-M. The CD39-like gene family: identification of three new human members (CD39L2, CD39L3, and CD39L4), their murine homologues, and a member of the gene family from <i>Drosophila melanogaster</i>. <i>Genomics</i> 50: 357-367, 1998.
------------	---

NCBI AND UNIPROT INFORMATION

NCBI GI #	6753346
NCBI GeneID	12495
NCBI Accession #	NP_033978.1
NCBI GenBank Nucleotide #	NM_009848.4
UniProt Accession #	P55772
Molecular Weight	57,205 Da
NCBI Official Full Name	ectonucleoside triphosphate diphosphohydrolase 1 isoform 2
NCBI Official Synonym Full Names	ectonucleoside triphosphate diphosphohydrolase 1
NCBI Official Symbol	Entpd1
NCBI Official Synonym Symbols	Cd39; AA408691; NTPDase-1; 2610206B08Rik
NCBI Protein Information	ectonucleoside triphosphate diphosphohydrolase 1; CD39 antigen; NTPDase 1; ecto-ATP diphosphohydrolase 1; ecto-ATPDase 1; ecto-ATPase 1; ectoapyrase; lymphoid cell activation antigen
UniProt Protein Name	Ectonucleoside triphosphate diphosphohydrolase 1
UniProt Gene Name	Entpd1
UniProt Synonym Gene Names	Cd39; NTPDase 1; Ecto-ATPDase 1; Ecto-ATPase 1
UniProt Entry Name	ENTP1_MOUSE

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.