

Rabbit anti-Human APRT Polyclonal Antibody | anti-APRT antibody

Anti-APRT Antibody

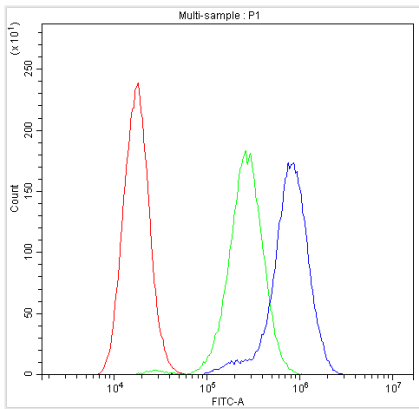
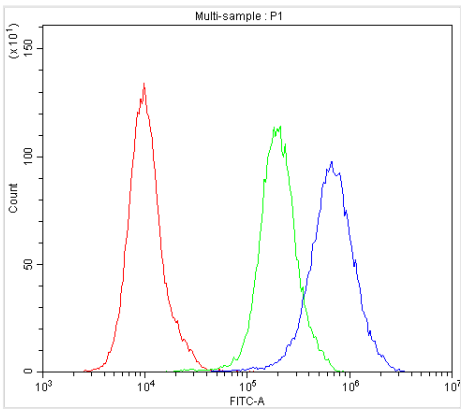
CATALOG # AAA46742	HOST Rabbit	REACTIVITY Human	APPLICATIONS Western Blot
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PRODUCT SYNONYMS

APRT; Polyclonal Antibody; Anti-APRT Antibody; AMP; AMP diphosphorylase; AMP pyrophosphorylase; APRTD; Transphosphoribosidase; P07741; Adenine phosphoribosyltransferase; anti-APRT antibody

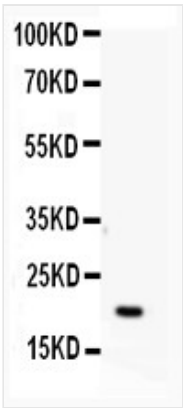
PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human
Clonality	Polyclonal
Isotype	IgG
Purity/Purification	Immunogen affinity purified.
Form/Format	Lyophilized Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na ₂ HPO ₄ , 0.05mg NaN ₃ .
Sequence Length	180
Applicable Applications for anti-APRT antibody	WB (Western Blot)
Notes	Tested Species: In-house tested species with positive results. Other applications have not been tested.
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.
Immunogen	A synthetic peptide corresponding to a sequence at the N-terminus of human APRT (5-49aa ELQLVEQRIRSFDFPTPGVVFRDISPVLKDPASFRAAIGLLARH), different from the related mouse sequence by ten amino acids, and from the related rat sequence by nine amino acids.
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.



FCM/FACS (Flow Cytometry)
Figure 3. Flow Cytometry analysis of PC-3 cells using anti-APRT antibody (AAA46742).Overlay histogram showing PC-3 cells stained with AAA46742 (Blue line).The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-APRT Antibody (AAA46742,1ug/1x10⁶ cells) for 30 min at 20 degree C. DyLight®488 conjugated goat anti-rabbit IgG (5-10ug/1x10⁶ cells) 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 (Red line) was also used as a control.

FCM/FACS (Flow Cytometry)
Figure 2. Flow Cytometry analysis of A549 cells using anti-APRT antibody (AAA46742).Overlay histogram showing A549 cells stained with AAA46742 (Blue line).The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-APRT Antibody (AAA46742,1ug/1x10⁶ cells) for 30 min at 20 degree C. DyLight®488 conjugated goat anti-rabbit IgG (5-10ug/1x10⁶ cells) 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 (Red line) was also used as a control.



WB (Western Blot)
Figure 1. Western blot analysis of APRT using anti-APRT antibody (AAA46742).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 50ug of sample under reducing conditions.lane 1: K562 whole cell 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-APRT antigen affinity purified polyclonal antibody at 0.5ug/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 1:10000 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 APRT at approximately 20KD. The expected band size for APRT is at 20KD.

ADDITIONAL INFORMATION

Related Product Information for anti-APRT antibody	Rabbit IgG polyclonal antibody for Adenine phosphoribosyltransferase(APRT) detection. Background: Adenine phosphoribosyltransferase (APRTase) is an enzyme encoded by the APRT gene, found in humans on chromosome 16. It belongs to the purine/pyrimidine phosphoribosyltransferase family. A conserved feature of this gene is the distribution of CpG dinucleotides. This enzyme catalyzes the formation of AMP and inorganic pyrophosphate from adenine and 5-phosphoribosyl-1-pyrophosphate (PRPP). It also produces adenine as a by-product of the polyamine biosynthesis pathway. A homozygous deficiency in this enzyme causes 2, 8-dihydroxyadenine urolithiasis. Two transcript variants encoding different isoforms have been found for this gene.
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References	1. Silva CH, Silva M, Iulek J, Thiemann OH (Jun 2008). "Structural complexes of human adenine phosphoribosyltransferase reveal novel features of the APRT catalytic mechanism". Journal of Biomolecular Structure & Dynamics. 25 (6): 589-97. 2. Sarver AE, Wang CC (Oct 2002). "The adenine phosphoribosyltransferase from Giardia lamblia has a unique reaction mechanism and unusual substrate binding properties". The Journal of Biological Chemistry. 277(42): 39973-80. 3. Valaperta R, Rizzo V, Lombardi F, Verdelli C, Piccoli M, Ghiroldi A, Creo P, Colombo A, Valisi M, Margiotta E, Panella R, Costa E (1 July 2014). "Adenine phosphoribosyltransferase (APRT) deficiency: identification of a novel nonsense mutation". BMC Nephrology. 15: 102.
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NCBI AND UNIPROT INFORMATION

NCBI GI #	4502171
NCBI GeneID	353
NCBI Accession #	NP_000476.1
NCBI GenBank Nucleotide #	NM_000485.2
UniProt Accession #	P07741 ; Q3KP55 ; Q68DF9 ; G5E9J2
Molecular Weight	14,557 Da
NCBI Official Full Name	adenine phosphoribosyltransferase isoform a
NCBI Official Synonym Full Names	adenine phosphoribosyltransferase
NCBI Official Symbol	APRT
NCBI Official Synonym Symbols	AMP; APRTD
NCBI Protein Information	adenine phosphoribosyltransferase
UniProt Protein Name	Adenine phosphoribosyltransferase
UniProt Gene Name	APRT
UniProt Synonym Gene Names	APRT

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.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/aprt-antibody-western-blot-elisa/46742>