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APRT Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP2893a

Product Information

Application	IHC-P, FC, IF, WB, E
Primary Accession	P07741
Reactivity	Human, Rat, Mouse
Predicted	Bovine, Canine, Rabbit
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	19608
Antigen Region	12-40

Additional Information

Gene ID	353
Other Names	Adenine phosphoribosyltransferase, APRT, APRT
Target/Specificity	This APRT antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 12-40 amino acids from the N-terminal region of human APRT.
Dilution	IHC-P~~1:100~500 FC~~1:10~50 IF~~1:10~50 WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	APRT Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	APRT (HGNC:626)
Function	Catalyzes a salvage reaction resulting in the formation of AMP, that is energically less costly than de novo synthesis.
Cellular Location	Cytoplasm.

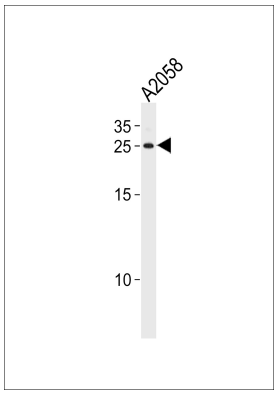
Background

A conserved feature of APRT 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.

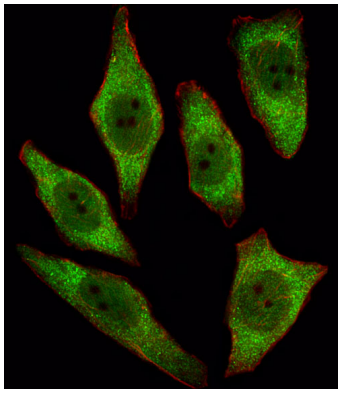
References

Silva,C.H., et. al.,J. Biomol. Struct. Dyn. 25 (6), 589-597 (2008)
Di Pietro,V., et. al., Clin. Biochem. 40 (1-2), 73-80 (2007)

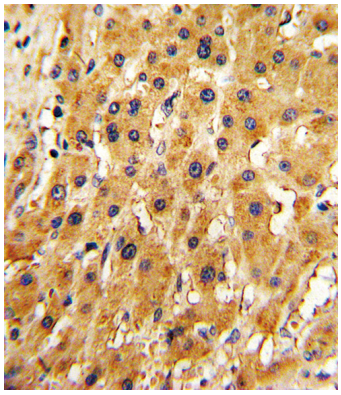
Images



APRT Antibody (N-term) (Cat. #AP2893a) western blot analysis in A2058 cell line lysates (35ug/lane).This demonstrates the APRT antibody detected the APRT protein (arrow).

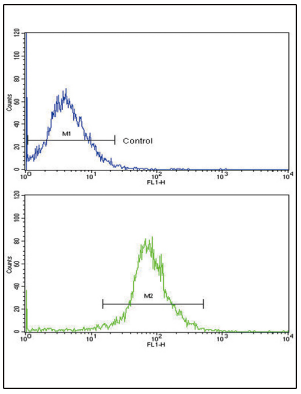


Fluorescent image of A549 cell stained with APRT Antibody (N-term)(Cat#AP2893a/SA091009AF).A549 cells were fixed with 4% PFA (20 min), permeabilized with Triton X-100 (0.1%, 10 min), then incubated with APRT primary antibody (1:25, 1 h at 37°C). For secondary antibody, Alexa Fluor® 488 conjugated donkey anti-rabbit antibody (green) was used (1:400, 50 min at 37°C).Cytoplasmic actin was counterstained with Alexa Fluor® 555 (red) conjugated Phalloidin (7units/ml, 1 h at 37°C).APRT immunoreactivity is localized to Cytoplasm and Nucleus significantly.



Formalin-fixed and paraffin-embedded human hepatocarcinoma with APRT Antibody (N-term), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.

Flow cytometric analysis of HepG2 cells using APRT Antibody (N-term)(bottom histogram) compared to a negative control cell (top histogram). FITC-conjugated goat-anti-rabbit secondary antibodies were used for the



analysis.

Citations

- Adenine phosphoribosyltransferase (APRT) deficiency: identification of a novel nonsense mutation.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.