

# APRT Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AW5489

## Product Information

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<b>Application</b>	IF, FC, IHC-P, WB
<b>Primary Accession</b>	<a href="#">P07741</a>
<b>Reactivity</b>	Mouse, Rat, Human
<b>Host</b>	Rabbit
<b>Clonality</b>	Polyclonal
<b>Calculated MW</b>	19608
<b>Isotype</b>	Rabbit IgG
<b>Antigen Source</b>	HUMAN

## Additional Information

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<b>Gene ID</b>	353
<b>Antigen Region</b>	27-60
<b>Other Names</b>	Adenine phosphoribosyltransferase, APRT, APRT
<b>Dilution</b>	IF~~1:10~50 FC~~1:10~50 IHC-P~~1:100~500 WB~~1:1000
<b>Target/Specificity</b>	This APRT antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 27-60 amino acids from the N-terminal region of human APRT.
<b>Format</b>	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.
<b>Storage</b>	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.
<b>Precautions</b>	APRT Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

## Protein Information

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<b>Name</b>	APRT ( <a href="#">HGNC:626</a> )
<b>Function</b>	Catalyzes a salvage reaction resulting in the formation of AMP, that is energetically less costly than de novo synthesis.
<b>Cellular Location</b>	Cytoplasm.

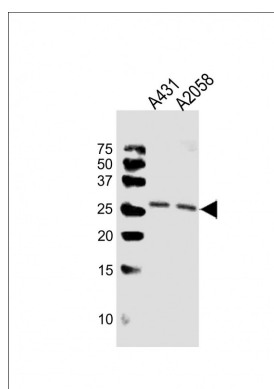
## Background

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.

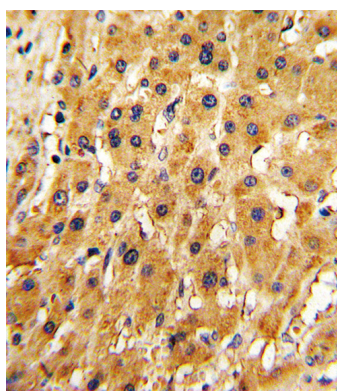
## References

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)

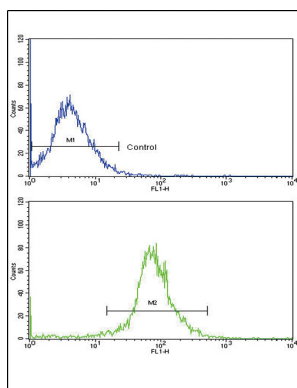
## Images



All lanes : Anti-APRT Antibody (N-term) at 1:1000 dilution  
Lane 1: A431 whole cell lysates Lane 2: A2058 whole cell lysates  
Lysates/proteins at 20  $\mu$ g per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution Predicted band size : 20 kDa  
Blocking/Dilution buffer: 5% NFDm/TBST.

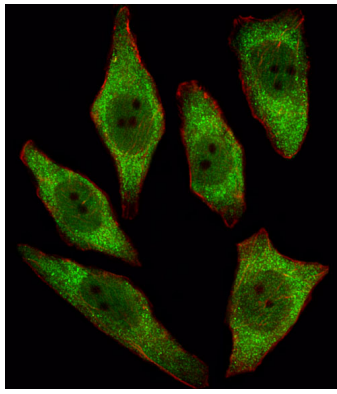


Formalin-fixed and paraffin-embedded human hepatocarcinoma with APRT Antibody (N-term), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.



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.

Fluorescent image of A549 cell stained with APRT Antibody (N-term)(Cat#AW5489/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 (7 units/ml, 1 h at 37°C). APRT immunoreactivity is localized to Cytoplasm and Nucleus significantly.

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