

#### **APRT Antibody (N-term)**

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AW5489

#### **Specification**

## **APRT Antibody (N-term) - Product Information**

Application FC, IHC-P, IF, WB,E

Primary Accession
Reactivity
Host
Clonality
P07741
Human
Rabbit
Polyclonal

Calculated MW H=20,15;M=20;R=20 KDa

Isotype Rabbit IgG
Antigen Source HUMAN

#### **APRT Antibody (N-term) - Additional Information**

Gene ID 353

**Antigen Region** 

27-60

#### **Other Names**

Adenine phosphoribosyltransferase, APRT, APRT

#### **Dilution**

FC~~1:10~50 IHC-P~~1:10~50 IF~~1:10~50 WB~~1:1000

# **Target/Specificity**

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.

#### 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.

#### **APRT Antibody (N-term) - 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.

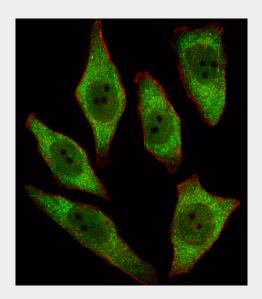
**Cellular Location** Cytoplasm.

# **APRT Antibody (N-term) - Protocols**

Provided below are standard protocols that you may find useful for product applications.

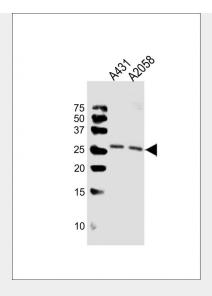
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

# **APRT Antibody (N-term) - Images**

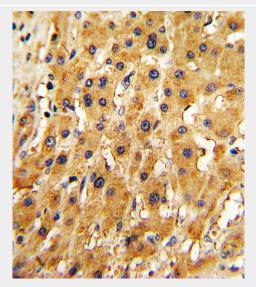


Fluorescent image of A549 cell stained with APRT Antibody (N-term)(Cat#AW5489/SA091009AF).A549 cells were fixed with 4% PFA (20 min), permeabilized with Triton X-100 (0.1%, 10 min), then incubated with APRT primary antibody (1:25, 1 h at 37°C). For secondary antibody, Alexa Fluor® 488 conjugated donkey anti-rabbit antibody (green) was used (1:400, 50 min at 37°C).Cytoplasmic actin was counterstained with Alexa Fluor® 555 (red) conjugated Phalloidin (7units/ml, 1 h at 37°C).APRT immunoreactivity is localized to Cytoplasm and Nucleus significantly.



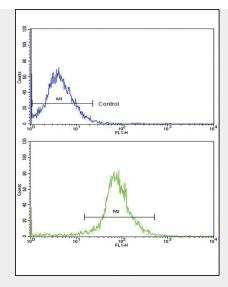


All lanes : Anti-APRT Antibody (N-term) at 1:1000 dilution Lane 1: A431 whole cell lysates Lane 2: A2058 whole cell lysates Lysates/proteins at 20  $\mu$ g per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution Predicted band size : 20 kDa Blocking/Dilution buffer: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

# APRT Antibody (N-term) - 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.

# **APRT Antibody (N-term) - 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)