

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

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP7183a

## **Specification**

## RFK Antibody (N-term) - Product Information

Application FC, WB, IHC-P,E

**Primary Accession** 0969G6 Other Accession Q8CFV9 Reactivity Human Predicted Mouse Host **Rabbit** Clonality **Polyclonal** Isotype Rabbit IgG Calculated MW 17623 Antigen Region 1-30

# RFK Antibody (N-term) - Additional Information

## **Gene ID 55312**

## **Other Names**

Riboflavin kinase, ATP:riboflavin 5'-phosphotransferase, Flavokinase, RFK

## Target/Specificity

This RFK antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 1-30 amino acids from the N-terminal region of human RFK.

## **Dilution**

FC~~1:10~50 WB~~1:1000 IHC-P~~1:50~100

E~~Use at an assay dependent concentration.

#### **Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

#### 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**

RFK Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

## **RFK Antibody (N-term) - Protein Information**





## **Name RFK**

**Function** Catalyzes the phosphorylation of riboflavin (vitamin B2) to form flavin-mononucleotide (FMN), hence rate-limiting enzyme in the synthesis of FAD. Essential for TNF-induced reactive oxygen species (ROS) production. Through its interaction with both TNFRSF1A and CYBA, physically and functionally couples TNFRSF1A to NADPH oxidase. TNF- activation of RFK may enhance the incorporation of FAD in NADPH oxidase, a critical step for the assembly and activation of NADPH oxidase.

**Cellular Location** Cytoplasm.

## **Tissue Location**

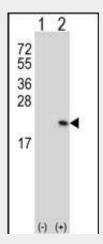
Detected in brain, placenta and urinary bladder.

## RFK Antibody (N-term) - Protocols

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

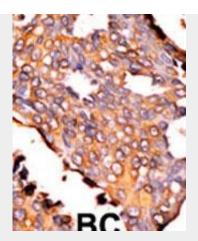
- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- <u>Immunofluorescence</u>
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

# RFK Antibody (N-term) - Images

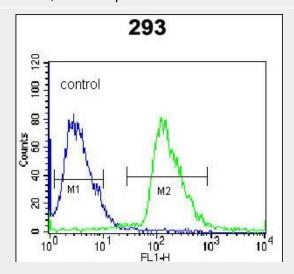


Western blot analysis of RFK (arrow) using rabbit polyclonal RFK Antibody (C15) (Cat. #AP7183a). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected (Lane 2) with the RFK gene.





Formalin-fixed and paraffin-embedded human cancer tissue reacted with the primary antibody, which was peroxidase-conjugated to the secondary antibody, followed by AEC staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated. BC = breast carcinoma; HC = hepatocarcinoma.



RFK Antibody (N-term) (Cat. #AP7183a) flow cytometric analysis of 293 cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

# RFK Antibody (N-term) - Background

RFK (riboflavin kinase) catalyzes the phosphorylation of riboflavin (vitamin B2) to form flavin-mononucleotide (FMN).

# **RFK Antibody (N-term) - References**

Karthikeyan, S., et al., Biochemistry 42(43):12532-12538 (2003). Karthikeyan, S., et al., Structure (Camb.) 11(3):265-273 (2003).

**RFK Antibody (N-term) - Citations** 

• TDP-43 accelerates age-dependent degeneration of interneurons.