

# RFK Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP7183a

## Product Information

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<b>Application</b>	IHC-P, WB, FC, E
<b>Primary Accession</b>	<a href="#">Q969G6</a>
<b>Other Accession</b>	<a href="#">Q8CFV9</a>
<b>Reactivity</b>	Human
<b>Predicted</b>	Mouse
<b>Host</b>	Rabbit
<b>Clonality</b>	Polyclonal
<b>Isotype</b>	Rabbit IgG
<b>Clone Names</b>	RB5566
<b>Calculated MW</b>	17623
<b>Antigen Region</b>	1-30

## Additional Information

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<b>Gene ID</b>	55312
<b>Other Names</b>	Riboflavin kinase, ATP:riboflavin 5'-phosphotransferase, Flavokinase, RFK
<b>Target/Specificity</b>	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.
<b>Dilution</b>	IHC-P~~1:100~500 WB~~1:1000 FC~~1:10~50 E~~Use at an assay dependent concentration.
<b>Format</b>	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.
<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>	RFK 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>	RFK
<b>Function</b>	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.

## Background

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

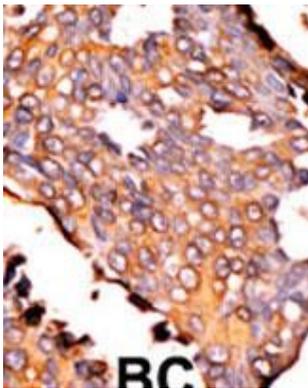
## References

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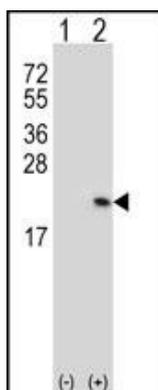
Karthikeyan, S., et al., *Biochemistry* 42(43):12532-12538 (2003).  
Karthikeyan, S., et al., *Structure (Camb.)* 11(3):265-273 (2003).

## Images

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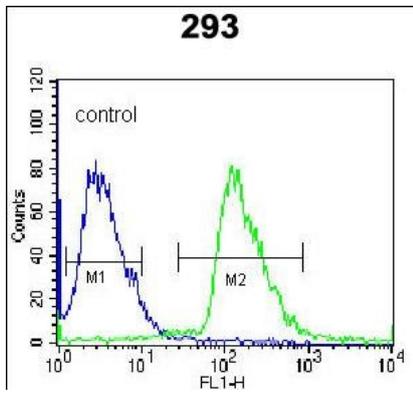


Formalin-fixed and paraffin-embedded human cancer tissue reacted with the primary antibody, which was peroxidase-conjugated to the secondary antibody, followed by AEC staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated. BC = breast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



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.

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.



## Citations

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- [TDP-43 accelerates age-dependent degeneration of interneurons.](#)

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