

# PRPS1/PRPS2/PRPS3 Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP7061A

## Product Information

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<b>Application</b>	WB, E
<b>Primary Accession</b>	<a href="#">P60891</a>
<b>Other Accession</b>	<a href="#">Q7ZXC9</a> , <a href="#">P09330</a> , <a href="#">Q9CS42</a> , <a href="#">Q4R4R7</a> , <a href="#">P11908</a> , <a href="#">P60892</a> , <a href="#">Q9D7G0</a> , <a href="#">Q4R4U3</a> , <a href="#">Q2HJ58</a>
<b>Reactivity</b>	Human, Mouse
<b>Predicted</b>	Bovine, Monkey, Rat, Xenopus
<b>Host</b>	Rabbit
<b>Clonality</b>	Polyclonal
<b>Isotype</b>	Rabbit IgG
<b>Calculated MW</b>	34834
<b>Antigen Region</b>	79-109

## Additional Information

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<b>Gene ID</b>	5631
<b>Other Names</b>	Ribose-phosphate pyrophosphokinase 1, PPRibP, Phosphoribosyl pyrophosphate synthase I, PRS-I, PRPS1
<b>Target/Specificity</b>	This PRPS1/PRPS2/PRPS3 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 79-109 amino acids from the N-terminal region of human PRPS1/PRPS2/PRPS3.
<b>Dilution</b>	WB~~1:1000 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>	PRPS1/PRPS2/PRPS3 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>	PRPS1 ( <a href="#">HGNC:9462</a> )
<b>Function</b>	Catalyzes the synthesis of phosphoribosylpyrophosphate (PRPP) that is essential for nucleotide synthesis.

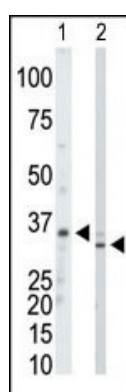
## Background

Phosphoribosylpyrophosphate synthetase (PRPS; EC 2.7.6.1) catalyzes the phosphoribosylation of ribose 5-phosphate to 5-phosphoribosyl-1-pyrophosphate, which is necessary for the de novo and salvage pathways of purine, pyrimidine, and pyridine biosynthesis. By PCR of human lymphoblast mRNA using primers based on the cDNA sequence of rat PRS I (Prps1), Roessler et al. (1990) isolated a partial human PRPS1 cDNA. They used this partial cDNA to screen lymphoblast cDNA libraries and isolated additional cDNAs corresponding to the entire PRPS1 coding region. The deduced PRPS1 protein has 318 amino acids.

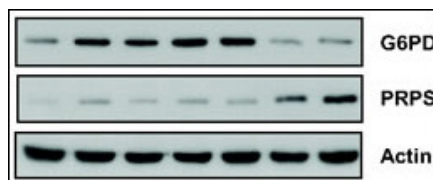
## References

Roessler, B. J., et al. Nucleic Acids Res. 18: 193 (1990).

## Images



The anti-PRPS1/2/3 Pab (Cat. #AP7061a) is used in Western blot to detect PRPS1/2/3 in mouse kidney tissue lysate (Lane 1) and HeLa cell lysate (Lane 2).



Role of PPP during MSC transformation. (A) G6PD activity decreased during MSC transformation ( $\square$   $P=0.0132$ ; t test). Western blot confirms the down-regulation of G6PD and the up-regulation of PRPS at the late stages of transformation.

## Citations

- [Transformation of human mesenchymal stem cells increases their dependency on oxidative phosphorylation for energy production.](#)

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