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PRPS1/PRPS2/PRPS3 Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP7061A

Product Information

Application	WB, E
Primary Accession	P60891
Other Accession	Q7ZXC9, P09330, Q9CS42, Q4R4R7, P11908, P60892, Q9D7G0, Q4R4U3, Q2HJ58
Reactivity	Human, Mouse
Predicted	Bovine, Monkey, Rat, Xenopus, Canine, Rabbit, Chicken
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	34834
Antigen Region	79-109

Additional Information

Gene ID	5631
Other Names	Ribose-phosphate pyrophosphokinase 1, PPRibP, Phosphoribosyl pyrophosphate synthase I, PRS-I, PRPS1
Target/Specificity	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.
Dilution	WB~~1:1000 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	PRPS1/PRPS2/PRPS3 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	PRPS1 (HGNC:9462)
Function	Catalyzes the synthesis of phosphoribosylpyrophosphate (PRPP) that is essential for nucleotide synthesis.

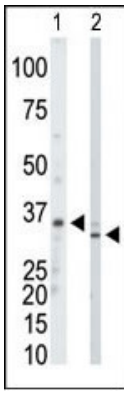
Background

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.

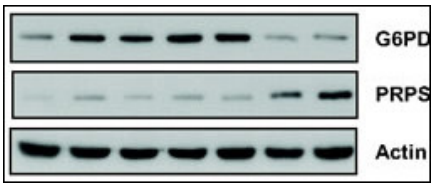
References

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 (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'.