

## Recombinant Human PRPS2, His-tagged

Cat. No. PRPS2-181H Lot. No. (See product label)

### SPECIFICATION

**Product Overview** Recombinant Human Ribose-Phosphate Pyrophosphokinase 2/PRPS2 is produced by our mammalian expression system in human cells. The target protein is expressed with sequence (Pro2-Leu318) of Human PRPS2 fused with a 6His tag at the C-terminus.

**Species** Human

**Source** HEK293

**Description** Ribose-Phosphate Pyrophosphokinase 2 (PRPS2) is a phosphoribosyl pyrophosphate synthetase that belongs to the ribose-phosphate pyrophosphokinase family. PRPS2 is a homodimer. The active form is probably an hexamer composed of three homodimers. PRPS2 catalyzes the synthesis of phosphoribosylpyrophosphate (PRPP) that is essential for nucleotide synthesis. PRPS2 catalyzes the synthesis of 5-phosphoribosyl 1-pyrophosphate from ATP and D-ribose 5-phosphate. In addition, PRPS2 plays a central role in the synthesis of purines and pyrimidines.

**AA Sequence**

```
MPNIVLFSGSSHQDLSQRVADRLGLELGKVVTKKFSNQETSVEIGESVRGEDVYIIQS
GCGEIND NLMELLIMINACKIASSSRVTAVIPCFPYARQDKKDKSRAPISAKLVANML
SVAGADHIITMDLH ASQIQGFFDIPVDNLYAEPAVLQWIRENIAEWKNCIIVSPDAGG
AKRVTSIADRLNVEFALIHKE RKKANEVDRMVLVGDVKDRVAILVDDMADTCGTICH
AADKLLSAGATKVYAILTHGIFSGPAISR INNAAFEAVVVTNTIPQEDKMKHCTKIQVI
DISMILAEAIRRTHNGESVSYLFSHVPLVDH HHHHH H
```

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<b>Endotoxin</b>	Less than 0.1 ng/μg (1 IEU/μg).
<b>Purity</b>	Greater than 95% as determined by reducing SDS-PAGE.
<b>GENE INFORMATION</b>	
<b>Gene Name</b>	PRPS2 phosphoribosyl pyrophosphate synthetase 2 [ Homo sapiens ]
<b>Official Symbol</b>	PRPS2
<b>Synonyms</b>	PRPS2; phosphoribosyl pyrophosphate synthetase 2; ribose-phosphate pyrophosphokinase 2; PRS II; ribose phosphate diphosphokinase 2; PRS-II; PPRibP synthetase; ribose-phosphate diphosphokinase 2; phosphoribosyl pyrophosphate synthase II; PRSII;
<b>Gene ID</b>	5634
<b>mRNA Refseq</b>	NM_001039091
<b>Protein Refseq</b>	NP_001034180
<b>MIM</b>	311860
<b>UniProt ID</b>	P11908
<b>Chromosome Location</b>	Xpter-q21
<b>Pathway</b>	5-Phosphoribose 1-diphosphate biosynthesis, organism-specific biosystem; Metabolic pathways, organism-specific biosystem; Metabolism, organism-specific biosystem; Metabolism of carbohydrates, organism-specific biosystem; Nucleotide Metabolism,

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organism-specific biosystem; PRPP biosynthesis I, organism-specific biosystem;  
PRPP biosynthesis, ribose 5P =>

**Function**

ATP binding; kinase activity; magnesium ion binding; nucleotide binding; protein  
homodimerization activity; ribose phosphate diphosphokinase activity; transferase  
activity;

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