RBKS Protein, Human (His)

Cat. No.:	HY-P76564
Synonyms:	Ribokinase; RK; RBKS; RBSK
Species:	Human
Source:	E. coli
Accession:	Q9H477 (M1-F322)
Gene ID:	64080
Molecular Weight:	Approximately 37 kDa

PROPERTIES

AA Sequence	M A A S G E P Q R Q W Q E E V A A V V V V G S C M T D L V S L T S R L P K T G E T I H G H K F F I G F G G K G A N Q C V Q A A R L G A M T S M V C K V G K D S F G N D Y I E N L K Q N D I S T E F T Y Q T K D A A T G T A S I I V N N E G Q N I I V I V A G A N L L L N T E D L R A A A N V I S R A K V M V C Q L E I T P A T S L E A L T M A R R S G V K T L F N P A P A I A D L D P Q F Y T L S D V F C C N E S E A E I L T G L T V G S A A D A G E A A L V L L K R G C Q V V I I T L G A E G C V V L S Q T E P E P K H I P T E K V K A V D T T G A G D S F V G A L A F Y L A Y Y P N L S L E D M L N R S N F I A A V S V Q A A G T Q S S Y P Y K K D L P L T L F
Biological Activity	Data is not available.
Appearance	Lyophilized powder.
Formulation	Lyophilized from a 0.2 μm filtered solution of sterile 50mM Tris-HCL, 300mM NaCl, pH 7.4, 5% trehalose, 5% mannitol and 0.01% Tween 80.
Endotoxin Level	<1 EU/μg, determined by LAL method.
Reconsititution	It is not recommended to reconstitute to a concentration less than 100 μg/mL in ddH_2O.
Storage & Stability	Stored at -20°C for 2 years. After reconstitution, it is stable at 4°C for 1 week or -20°C for longer (with carrier protein). It is recommended to freeze aliquots at -20°C or -80°C for extended storage.
Shipping	Room temperature in continental US; may vary elsewhere.

DESCRIPTION

Background	The RBKS protein plays a vital role in cellular metabolism by catalyzing the phosphorylation of ribose at O-5, a reaction that

requires ATP and magnesium. This enzymatic activity leads to the formation of D-ribose-5-phosphate, a crucial intermediate that can be utilized for the synthesis of nucleotides, including purines and pyrimidines, as well as histidine and tryptophan. Additionally, D-ribose-5-phosphate serves as a key component in the pentose phosphate pathway, contributing to the generation of reducing equivalents and nucleotide precursors. The versatility of RBKS in directing ribose-5-phosphate towards various biosynthetic pathways underscores its importance in coordinating cellular processes essential for nucleotide and energy metabolism.

Tel: 609-228-6898 Fax: 609-228-5909 E-mail: tech@MedChemExpress.com
Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA