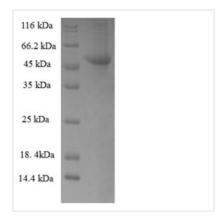






Recombinant Human Ribokinase (RBKS), partial

Product Code	CSB-EP019397HU
Abbreviation	Recombinant Human RBKS protein, partial
Storage	The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.
Uniprot No.	Q9H477
Product Type	Recombinant Protein
Immunogen Species	Homo sapiens (Human)
Purity	Greater than 90% as determined by SDS-PAGE.
Sequence	AASGEPQRQWQEEVAAVVVVGSCMTDLVSLTSRLPKTGETIHGHKFFIGFGG KGANQCVQAARLGAMTSMVCKVGKDSFGNDYIENLKQNDISTEFTYQTKDAA TGTASIIVNNEGQNIIVIVAGANLLLNTEDLRAAANVISRAKVMVCQLEITPATSL EALTMARRSGVKTLFNPAPAIADLDPQFYTLSDVFCCNESEAEILTGLTVGSAA DAGEAALVLLKRGCQVVIITLGAEGCVVLSQTEPEPKHIPTEKVKAVDTTGAGD SFVGALAFYLAYYPNLSLEDMLNRSNFIAAVSVQAAGTQSSYPYKKDLPLTLF
Research Area	Metabolism
Source	E.coli
Target Names	RBKS
Protein Names	Recommended name: Ribokinase EC= 2.7.1.15
Expression Region	2-322aa
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
Tag Info	N-terminal 6xHis-SUMO-tagged
Mol. Weight	50.0kDa
Protein Length	Partial
Image	(Tris-Glycine gel) Discontinuous SDS-PAGE



(Tris-Glycine gel) Discontinuous SDS-PAGE (reduced) with 5% enrichment gel and 15% separation gel.











Description

Amino acids 2-322 constitute the expression domain of recombinant Human RBKS. This RBKS protein is theoretically predicted to have a molecular weight of 50 kDa. This RBKS protein is produced using e.coli expression system. The RBKS coding gene included the N-terminal 6xHis-SUMO tag, which simplifies the detection and purification processes of the recombinant RBKS protein in following stages of expression and purification.

Ribokinase (RBKS) is a crucial enzyme involved in the phosphorylation of ribose, playing a central role in the cellular metabolism of carbohydrates. As part of the pentose phosphate pathway, RBKS catalyzes the conversion of ribose to ribose-5-phosphate by transferring a phosphate group from ATP to ribose. This phosphorylation step is vital for the subsequent utilization of ribose-5-phosphate in various metabolic pathways, including nucleotide biosynthesis and the generation of reducing equivalents. Beyond its central role in energy metabolism, RBKS has been implicated in cellular stress responses and is associated with the pathogenesis of certain diseases. Investigating RBKS provides insights into the intricate regulation of cellular processes and its potential implications in metabolic disorders.

Reconstitution

We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Please reconstitute protein in deionized sterile water to a concentration of 0.1-1.0 mg/mL.We recommend to add 5-50% of glycerol (final concentration) and aliquot for long-term storage at -20°C/-80°C. Our default final concentration of glycerol is 50%. Customers could use it as reference.

Shelf Life

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