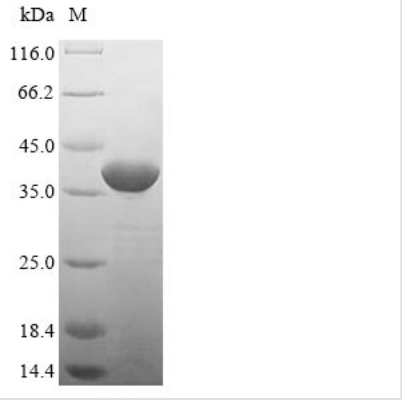
Recombinant Saccharomyces cerevisiae Nucleoside diphosphate kinase (YNK1)

Product Code	CSB-EP015889SVG
Relevance	Major role in the synthesis of nucleoside triphosphates other than ATP. The ATP gamma phosphate is transferred to the NDP beta phosphate via a ping-pong mechanism, using a phosphorylated active-site intermediate. Required for repair of UV radiation- and etoposide-induced DNA damage.
Abbreviation	Recombinant Saccharomyces cerevisiae YNK1 protein
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.	P36010
Product Type	Recombinant Protein
Immunogen Species	Saccharomyces cerevisiae (strain ATCC 204508 / S288c) (Baker's yeast)
Purity	Greater than 85% as determined by SDS-PAGE.
Sequence	MSSQTERTFIAVKPDGVQRGLVSQILSRFEKKGYKLVAIKLVKADDKLLEQHYA EHVGKPFFPKMVSFMKSGPILATVWEGKDVVRQGRTILGATNPLGSAPGTIRG DFGIDLGRNVCHGSDSVDSAEREINLWFKKEELVDWESNQAKWIYE
Research Area	Others
Source	E.coli
Target Names	YNK1
Protein Names	NDK1, YNK
Expression Region	1-153aa
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
Tag Info	N-terminal 10xHis-SUMO-tagged and C-terminal Myc-tagged
Mol. Weight	37.2 kDa
Protein Length	Full Length
Image	



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

Description

This Saccharomyces cerevisiae YNK1 recombinant protein was produced in E.coli, where the gene sequence encoding Saccharomyces cerevisiae YNK1 (1-153aa) was expressed with the N-terminal 10xHis-SUMO tag and C-terminal Myc tag. The purity of this YNK1 protein was greater than 85% by SDS-PAGE. Ynk1 protein typically possesses a catalytic domain associated with the nucleoside diphosphate kinase family. Its function can vary depending on the physiological state and needs of Saccharomyces cerevisiae cells. Ynk1 is a nucleoside diphosphate kinase, and it plays an important biological role in Saccharomyces cerevisiae cells. Similar to other nucleoside diphosphate kinases, Ynk1 is responsible for catalyzing the reaction of nucleoside diphosphorylation, converting a nucleoside monophosphate into a nucleoside diphosphate. This process plays a crucial role in nucleoside metabolism within the cell and is closely associated with processes like energy transfer and DNA synthesis. Furthermore, one of the primary biological roles of Ynk1 is to maintain the production of ATP within Saccharomyces cerevisiae cells. ATP is the cell's primary energy molecule, supplying energy for various biological processes such as cell division, protein synthesis, and transportation.

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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