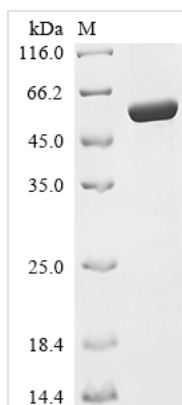




Recombinant Mycobacterium tuberculosis

Amidophosphoribosyltransferase (purF)

Product Code	CSB-EP018427GKB
Abbreviation	Recombinant Mycobacterium tuberculosis purF 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.	P9WHQ6
Form	Liquid or Lyophilized powder
Storage Buffer	If the delivery form is liquid, the default storage buffer is Tris/PBS-based buffer, 5%-50% glycerol. If the delivery form is lyophilized powder, the buffer before lyophilization is Tris/PBS-based buffer, 6% Trehalose.
Product Type	Recombinant Mycobacterium tuberculosis Amidophosphoribosyltransferase(purF)
Immunogen Species	Mycobacterium tuberculosis (strain CDC 1551 / Oshkosh)
Purity	Greater than 85% as determined by SDS-PAGE.
Sequence	CGVFGVWAPGEDVAKLTYYGlyALQHRGQEAAGIAVADGSQVLVFKDLGLVS QVFDEQTLAAMQGHVAIGHCRYSTTGDTTWENAQPVFRNTAAGTGVALGHN GNLVNAAALAAARDAGLIATRC PAPATTTSDILGALLAHGAADSTLEQAALDL LPTVRGAFCLTFMDENTLYACRDPYGV RPLSLGR LDRGWVVA SETAALDIVGA SFVRDIEPGELLAIDADGVRSTRFANPTPKGCVFEYVYLARPDSTIAGRSVHAA RVEIGRRLARECPVEADLVIGVPESGTPAAVGYAQESGVPYGGQLMKNA YVG RTFIQPSQTIRQLGIRLKLNPLKEVIRGKRLIVVDDSI VRGNTQRALVRMLREAG AVELHVRIASPPVKWPCFYGIDFPSPAELIANAVENEDEMLEAVRHAIGADTLG YISLRGMVAASEQPTSRLCTACFDGKYPIELPRETALGKNVIEHMLANAARGAA LGELAADDEV PVGR
Research Area	Others
Source	E.coli
Target Names	purF
Expression Region	35-527aa
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
Tag Info	N-terminal 6xHis-tagged
Mol. Weight	56.5 kDa
Protein Length	Full Length of Mature Protein
Image	



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

Description

To generate a recombinant *Mycobacterium tuberculosis* Amidophosphoribosyltransferase (purF) protein in the *E. coli* expression system, the full-length mature purF gene fragment (35-527aa) specific to *Mycobacterium tuberculosis* along with an N-terminal 6xHis-tag is cloned into a suitable expression vector. The resulting recombinant plasmid is then transformed into *E. coli* host cells using a transformation method. The transformed cells are selected using antibiotic resistance markers to ensure the presence of the recombinant plasmid and are cultured in a growth medium optimized for protein expression. The cells are induced with an inducer molecule, such as IPTG, to initiate the expression of the recombinant purF protein. After incubation, the cells are harvested and lysed to release the intracellular contents including the expressed recombinant purF protein. The purity of the recombinant purF protein is assessed through SDS-PAGE analysis, demonstrating a purity level of up to 85%. On the gel, the recombinant *Mycobacterium tuberculosis* purF protein appears as a distinct band with a molecular weight of approximately 57 kDa.

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

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.