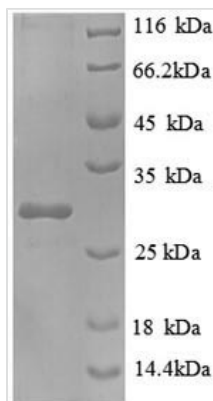




# Recombinant Escherichia coli NAD (P)H-flavin reductase (fre)

<b>Product Code</b>	CSB-RP185374Ba
<b>Relevance</b>	Catalyzes the reduction of soluble flavins by reduced pyridine nucleotides. Ses to reduce the complexed Fe <sup>3+</sup> iron of siderophores to Fe <sup>2+</sup> , thus releasing it from the chelator.
<b>Abbreviation</b>	Recombinant E.coli fre protein
<b>Storage</b>	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.
<b>Uniprot No.</b>	P0AEN1
<b>Alias</b>	Aquacobalamin reductaseFMN reductaseFerrisiderophore reductase CNAD(P)H:flavin oxidoreductaseRiboflavin reductase [NAD(P)H]
<b>Product Type</b>	Recombinant Protein
<b>Immunogen Species</b>	Escherichia coli (strain K12)
<b>Purity</b>	Greater than 90% as determined by SDS-PAGE.
<b>Sequence</b>	TTLSCKVTSVEAITDTVYRVRIVPDAAFSFRAGQYLMVVMDERDKRPFSMAST PDEKGFIELHIGASEINLYAKAVMDRILKDHQIVVDIPHGEAWLRDDEERPMILIA GGTGFSYARSILLTALARNPNRDITIYWGGREEQHLYDLCELEALSLKHPGLQV VPVVEQPEAGWRGRTGTVLTAVLQDGHGTAEHDIYIAGRFEMAKIARDLFCSE RNAREDRFLFGDAFAFI
<b>Research Area</b>	Others
<b>Source</b>	E.coli
<b>Target Names</b>	fre
<b>Expression Region</b>	2-233
<b>Notes</b>	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
<b>Tag Info</b>	N-terminal 6xHis-tagged
<b>Mol. Weight</b>	30.1kDa
<b>Protein Length</b>	Full Length of Mature Protein
<b>Image</b>	



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

## Description

The expression of recombinant Escherichia coli (strain K12) fre protein in e.coli cells requires incorporating a DNA fragment encoding the Escherichia coli (strain K12) fre protein (2-233aa) into a plasmid vector and transforming this vector into e.coli cells. Positive cells are screened, cultured, and induced to produce the fre protein. A N-terminal 6xHis tag is attached to the protein. The recombinant Escherichia coli (strain K12) fre protein is collected and purified from the cell lysate through affinity purification. It is assessed through SDS-PAGE and subsequent staining of the gel with Coomassie Brilliant Blue, with a purity of exceeding 90%.

## 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.