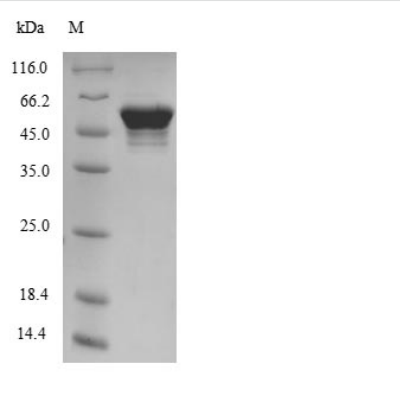
Recombinant Mouse ATP synthase subunit beta, mitochondrial (Atp5f1b), partial

Product Code	CSB-EP002350MO1
Relevance	Mitochondrial membrane ATP synthase (F1F0 ATP synthase or Complex V) produces ATP from ADP in the presence of a proton gradient across the membrane which is generated by electron transport complexes of the respiratory chain. F-type ATPases consist of two structural domains, F1 - containing the extramembraneous catalytic core, and F0 - containing the membrane proton channel, linked together by a central stalk and a peripheral stalk. During catalysis, ATP synthesis in the catalytic domain of F1 is coupled via a rotary mechanism of the central stalk subunits to proton translocation. Subunits alpha and beta form the catalytic core in F1. Rotation of the central stalk against the surrounding alpha3beta3 subunits leads to hydrolysis of ATP in three separate catalytic sites on the beta subunits.
Abbreviation	Recombinant Mouse ATP5B 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.	P56480
Product Type	Recombinant Protein
Immunogen Species	Mus musculus (Mouse)
Purity	Greater than 85% as determined by SDS-PAGE.
Sequence	YSVFAGVGERTREGNDLYHEMIESGVINLKDATSKVALVYGQMNEPPGARAR VALTGLTVAEYFRDQEGQDVLLFIDNIFRFTQAGSEVSALLGRIPSAVGYQPTL ATDMGTMQERITTTKKGSITSVQAIYVPADDLTDPAPATTFAHLDATTVLSRAIA ELGIYPAVDPLDSTSRIMDPNIVGNEHYDVARGVQKILQDYKSLQDIIAILGMDE LSEEDKLTVSRARKIQRFLSQPFQVAEVFTGHMGKLVPLKETIKGFQQILAGEY DHLPEQAFYMVGPIEEAVAKADKLAEEHGS
Research Area	Tags & Cell Markers
Source	E.coli
Target Names	Atp5b
Expression Region	230-529aa
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	52.8kDa
Protein Length	Partial

Image



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

Description

The gene coding for the Mouse ATP5B protein (230-529aa) is introduced into a plasmid vector, creating recombinant plasmid that is subsequently transformed into e.coli cells. e.coli cells capable of surviving in the presence of a specific antibiotic are selected and then cultured under conditions favorable for the expression of the gene of interest. A N-terminal 10xHis-SUMO tag and C-terminal Myc tag is attached to the protein. Post-expression, the recombinant Mouse ATP5B protein is isolated and purified from the cell lysate using affinity purification. Denaturing SDS-PAGE is applied to resolve the resulting recombinant Mouse ATP5B protein, revealing a purity exceeding 85%.

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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