Recombinant mouse ATP synthase subunit beta, mitochondrial

Catalog No: #AP72448

Package Size: #AP72448-1 20ug #AP72448-2 100ug #AP72448-3 1mg

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Description

Product Name	Recombinant mouse ATP synthase subunit beta, mitochondrial
Brief Description	Recombinant Protein
Host Species	Yeast
Purification	Greater than 90% as determined by SDS-PAGE.
Immunogen Description	Expression Region:47-529aaSequence Info:Full Length
Accession No.	P56480
Uniprot	P56480
GeneID	11947;
Calculated MW	53.7 kDa
Tag Info	N-terminal 6xHis-tagged
Target Sequence	AAQASAAPKAGTATGRIVAVIGAVVDVQFDEGLPPILNALEVQGRDSRLVLEVAQHLGESTVRTIAMDGTEGLV RGQKVLDSGAPIKIPVGPETLGRIMNVIGEPIDERGPIKTKQFAPIHAEAPEFIEMSVEQEILVTGIKVVDLLAPYA KGGKIGLFGGAGVGKTVLIMELINNVAKAHGGYSVFAGVGERTREGNDLYHEMIESGVINLKDATSKVALVYG QMNEPPGARARVALTGLTVAEYFRDQEGQDVLLFIDNIFRFTQAGSEVSALLGRIPSAVGYQPTLATDMGTMQ ERITTTKKGSITSVQAIYVPADDLTDPAPATTFAHLDATTVLSRAIAELGIYPAVDPLDSTSRIMDPNIVGNEHYD VARGVQKILQDYKSLQDIIAILGMDELSEEDKLTVSRARKIQRFLSQPFQVAEVFTGHMGKLVPLKETIKGFQQIL AGEYDHLPEQAFYMVGPIEEAVAKADKLAEEHGS
Formulation	Tris-based buffer50% glycerol
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.Notes:Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.

Background

Mitochondrial mbrane ATP synthase (F1F0 ATP synthase or Complex V) produces ATP from ADP in the presence of a proton gradient across the mbrane which is generated by electron transport complexes of the respiratory chain. F-type ATPases consist of two structural domains, F1 - containing the extrambraneous catalytic core, and F0 - containing the mbrane 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.

References

Modulation of F0F1-ATP synthase activity by cyclophilin D regulates matrix adenine nucleotide levels.Chinopoulos C., Konrad C., Kiss G., Metelkin E., Torocsik B., Zhang S.F., Starkov A.A.FEBS J. 278:1112-1125(2011)Research Topic:Others

Note: This product is for in vitro research use only