

# Recombinant Mouse ATP synthase subunit beta, mitochondrial(Atp5b)

Catalog No: #AP70066

Package Size: #AP70066-1 20ug #AP70066-2 100ug #AP70066-3 1mg

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## Description

|                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
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| Product Name          | Recombinant Mouse ATP synthase subunit beta, mitochondrial(Atp5b)                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Host Species          | E.coli                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Purification          | Greater than 90% as determined by SDS-PAGE.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Immunogen Description | Expression Region:47-529aaSequence Info:Full Length                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Accession No.         | P56480                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Calculated MW         | 67.7 kDa                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Tag Info              | N-terminal 6xHis-SUMO-tagged                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Target Sequence       | AAQASAAPKAGTATGRIVAVIGAVVDVQFDEGLPPILNALEVQGRDSRLVLEVAQHLGESTVRTIAMDGTEGLV<br>RGQKVLDSGAPIKIPVGPETLGRIMNVIGEPIDERGPIKTKQFAPIHAEAPEFIEMSVEQEILVTGIKVVDLLAPYA<br>KGGKIGLFGGAGVGKTVLIMELINNVAKAHGGYSVFAGVGERTREGNDLYHEMIESGVINLKDATSKVALVYG<br>QMNEPPGARARVALTGLTVAEYFRDQEGQDVLLFIDNIFRFTQAGSEVSALLGRIPSAVGYQPTLATDMGMTMQ<br>ERITTTKKGSITSVQAIYVPADDLTDPAPATTF AHLDATTVLSRAIAELGIYPAVDPLDSTSRIMDPNIVGNEHYD<br>VARGVQKILQDYKSLQDIIAILGMDELSEEDKLTVSRARKIQRFLSQPFQVAEVFTGHMGKLVPLKETIKGFQQIL<br>AGEYDHLPEQAFYMGPIEEAVAKADKLAEEHGS |
| 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.<br><br>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 extramembraneous 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

Label-free quantitative proteomics of the lysine acetylome in mitochondria identifies substrates of SIRT3 in metabolic pathways.Rardin M.J., Newman J.C., Held J.M., Cusack M.P., Sorensen D.J., Li B., Schilling B., Mooney S.D., Kahn C.R., Verdin E., Gibson B.W.Proc. Natl. Acad. Sci. U.S.A. 110:6601-6606(2013)Research Topic:Others

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Note: This product is for in vitro research use only and is not intended for use in humans or animals.