10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

ATPB Antibody
Rabbit mAb
Catalog # AP91189

Specification

ATPB Antibody - Product Information

Application	**WB, IHC, ICC, IP**
Primary Accession	P06576
Reactivity	**Rat**
Clonality	**Monoclonal**

Other Names
ATP 5B; ATP synthase subunit beta mitochondrial; ATPB; ATPMB; ATPSB;

Isotype	**Rabbit IgG**
Host	**Rabbit**
Calculated MW	**56560 Da**

ATPB Antibody - Additional Information

Dilution	**WB~~1:1000 IHC~~1:100~500 ICC~~N/A IP~~N/A**
Purification	**Affinity-chromatography**
Immunogen	**A synthesized peptide derived from human ATPB**
Description	**Rotation of the central stalk against the surrounding alpha(3)beta(3) subunits leads to hydrolysis of ATP in three separate catalytic sites on the beta subunits.**
Storage Condition and Buffer	**Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.**

ATPB Antibody - Protein Information

Name ATP5F1B (HGNC:830)

Function
Catalytic subunit beta, of the mitochondrial membrane ATP synthase complex (F(1)F(0) ATP synthase or Complex V) that 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 (Probable) (PubMed:37244256). ATP synthase complex consist of a soluble F(1) head domain - the catalytic core - and a membrane F(1) domain - the membrane proton channel (PubMed:37244256). These two

domains are linked by a central stalk rotating inside the F(1) region and a stationary peripheral stalk (PubMed:37244256). During catalysis, ATP synthesis in the catalytic domain of F(1) is coupled via a rotary mechanism of the central stalk subunits to proton translocation (Probable). In vivo, can only synthesize ATP although its ATP hydrolase activity can be activated artificially in vitro (By similarity). With the subunit alpha (ATP5F1A), forms the catalytic core in the F(1) domain (PubMed:37244256).

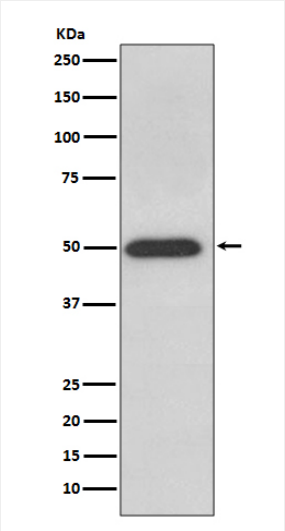
Cellular Location
Mitochondrion inner membrane; Peripheral membrane protein {ECO:0000250|UniProtKB:P00829}; Matrix side {ECO:0000250|UniProtKB:P00829, ECO:0000269|PubMed:25168243}

ATPB Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

ATPB Antibody - Images



Western blot analysis of ATPB expression in HeLa cell lysate.