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ATPB Antibody

Rabbit mAb
Catalog # AP91189

Product Information

Application	WB, IHC, IF, ICC, IP, IHF
Primary Accession	P06576
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Other Names	ATP 5B; ATP synthase subunit beta mitochondrial; ATPB; ATPMB; ATPSB;
Isotype	Rabbit IgG
Host	Rabbit
Calculated MW	56560

Additional Information

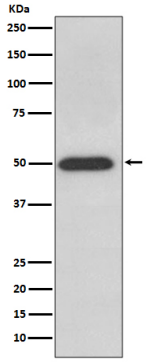
Dilution	WB 1:500~1:2000 IHC 1:50~1:200 ICC/IF 1:50~1:200 IP 1:50
Purification	Affinity-chromatography
Immunogen	A synthesized peptide derived from human ATPB
Description	Rotation of the central stalk against the surrounding alpha(3)beta(3) subunits leads to hydrolysis of ATP in three separate catalytic 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.

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}

Images



Western blot analysis of ATPB expression in HeLa cell lysate.