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KD-Validated Anti-ATP5B Rabbit Monoclonal Antibody

Rabbit monoclonal antibody
Catalog # AGI1323

Product Information

Application	WB, FC, ICC
Primary Accession	P06576
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Isotype	Rabbit IgG
Clone Names	23GB 3255
Calculated MW	56560
Gene Name	ATP5F1B
Aliases	ATP5F1B; ATP Synthase F1 Subunit Beta; ATP5B; ATPSB; ATP Synthase, H+ Transporting, Mitochondrial F1 Complex, Beta Polypeptide; ATP Synthase Subunit Beta, Mitochondrial; ATPMB; Mitochondrial ATP Synthetase, Beta Subunit; Mitochondrial ATP Synthase Beta Subunit; Epididymis Secretory Protein Li 271; EC 3.6.3.14; EC 7.1.2.2; HEL-S-271; EC 3.6.3; HUMOP2
Immunogen	A synthesized peptide derived from human ATPB

Additional Information

Gene ID	506
Other Names	ATP synthase F(1) complex subunit beta, mitochondrial, 7.1.2.2, ATP synthase F1 subunit beta {ECO:0000312|HGNC:HGNC:830}, ATP5F1B (HGNC:830)

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}

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