

ATP5F1A Rabbit mAb

Catalog # AP79034

Product Information

Application WB, IHC-P, FC, ICC

Primary Accession <u>P25705</u>

Reactivity Human, Mouse, Rat

Host Rabbit

Clonality Monoclonal Antibody

Calculated MW 59751

Additional Information

Gene ID 498

Other Names ATP5F1A

Dilution WB~~1/500-1/1000 IHC-P~~N/A FC~~1:10~50 ICC~~N/A

Format 10mM PBS, pH 7.4, 150mM sodium chloride, 0.05% BSA, 0.02% sodium azide

and 50% glycerol.

Storage Store at 4°C short term. Aliquot and store at -20°C long term. Avoid

freeze/thaw cycles.

Protein Information

Name ATP5F1A (HGNC:823)

Function Subunit alpha, 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). 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:<u>37244256</u>). These two domains are linked by a central stalk rotating inside the F(1) region and a stationary peripheral stalk (PubMed:<u>37244256</u>). 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 catalytic subunit

beta (ATP5F1B), forms the catalytic core in the F(1) domain

(PubMed:<u>37244256</u>). Subunit alpha does not bear the catalytic high- affinity ATP-binding sites (Probable). Binds the bacterial siderophore enterobactin and can promote mitochondrial accumulation of enterobactin-derived iron

ions (PubMed:30146159).

Cellular Location Mitochondrion. Mitochondrion inner membrane

{ECO:0000250|UniProtKB:P19483}; Peripheral membrane protein

{ECO:0000250|UniProtKB:P19483}; Matrix side

{ECO:0000250 | UniProtKB:P19483}. Cell membrane; Peripheral membrane protein; Extracellular side. Note=Colocalizes with HRG on the cell surface of

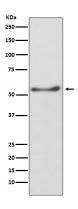
T-cells (PubMed:19285951).

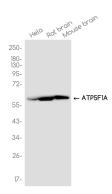
Tissue Location

Fetal lung, heart, liver, gut and kidney. Expressed at higher levels in the fetal

brain, retina and spinal cord

Images





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