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ATP Synthase C Rabbit mAb

Catalog # AP74845

Product Information

Application	WB
Primary Accession	P05496
Reactivity	Rat, Human, Mouse
Host	Rabbit
Clonality	Monoclonal Antibody
Isotype	IgG
Conjugate	Unconjugated
Purification	Affinity Purified
Calculated MW	14277

Additional Information

Gene ID	516
Other Names	ATP5MC1
Dilution	WB~~1:500-1:1000
Format	Liquid in 50mM Tris-Glycine(pH 7.4), 0.15M NaCl, 40%Glycerol, 0.01% sodium azide and 0.05% BSA.
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.

Protein Information

Name	ATP5MC1 (HGNC:841)
Function	Subunit c, 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: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). With the subunit a (MT- ATP6), forms the proton-conducting channel in the F(0) domain, that contains two crucial half-channels (inlet and outlet) that facilitate proton movement from the mitochondrial intermembrane space (IMS) into the matrix (PubMed:37244256). Protons are taken up via the inlet half- channel and released through the outlet half-channel, following a Grotthuss

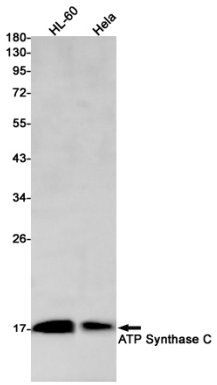
mechanism (PubMed:37244256).

Cellular Location Mitochondrion membrane; Multi-pass membrane protein

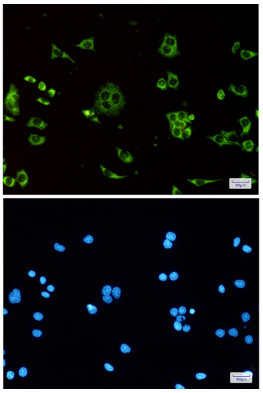
Background

Mitochondrial membrane ATP synthase (F(1)F(0) ATP synthase or Complex V) 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. F-type ATPases consist of two structural domains, F(1) - containing the extramembraneous catalytic core and F(0) - containing the membrane proton channel, linked together by a central stalk and a peripheral stalk. 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. Part of the complex F(0) domain. A homomeric c-ring of probably 10 subunits is part of the complex rotary element.

Images



Western blot analysis of ATP Synthase C in HL-60, Hela lysates using ATP Synthase C antibody.



Immunocytochemistry analysis of ATP synthase C (green) in Hela using ATP synthase C antibody,and DAPI(blue)

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