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Anti-ATP6 Antibody

Catalog # AP51728

Product Information

Application	WB, IF/IC
Primary Accession	P00846
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	24817

Additional Information

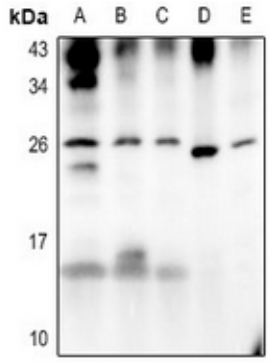
Gene ID	4508
Other Names	ATP6; ATPASE6; MTATP6; ATP synthase subunit a; F-ATPase protein 6
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the center region of human ATP6. The exact sequence is proprietary.
Dilution	WB~~WB (1/500 - 1/1000) IF/IC~~N/A
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

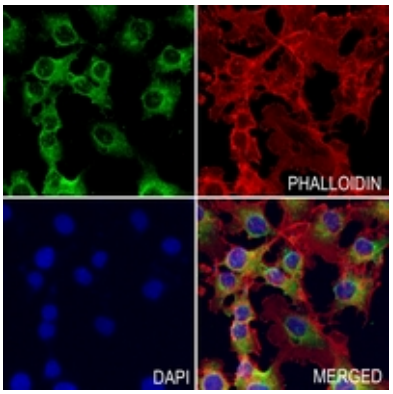
Name	MT-ATP6 (HGNC:7414)
Function	Subunit a, of the mitochondrial membrane ATP synthase complex (F(1)F(0) ATP synthase or Complex V) that produces ATP from ADP in the presence of a proton gradient across the membrane which is generated by electron transport complexes of the respiratory chain (Probable). 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 c (ATP5MC1), 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 inner membrane; Multi-pass membrane protein

Images



Western blot analysis of ATP6 expression in HEK293T (A), HCT116 (B), A375 (C), PC12 (D), CT26 (E) whole cell lysates. (Predicted band size: 24 kD; Observed band size: 25 kD)



Immunofluorescent analysis of ATP6 staining in COS7 cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a hidified chamber. Cells were washed with PBST and incubated with a AF488-conjugated secondary antibody (green) in PBS at room temperature in the dark. Phalloidin - AF594 was used to stain Actin filaments (red). DAPI was used to stain the cell nuclei (blue).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.