

Anti-ATP5A1 / ATP Synthase Alpha Antibody

Rabbit Anti Human Polyclonal Antibody

Catalog # ALS18613

Product Information

Application	WB, IHC-P
Primary Accession	P25705
Predicted	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	59751

Additional Information

Gene ID	498
Alias Symbol	ATP5A1
Other Names	ATP5A1, ATP5AL2, ATP5A, HATP1, Mitochondrial ATP synthase, MOM2, ORM, OMR, ATPM
Target/Specificity	Human ATP5A1 / ATP Synthase Alpha
Reconstitution & Storage	Affinity purified
Precautions	Anti-ATP5A1 / ATP Synthase Alpha Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

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: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 catalytic subunit beta (ATP5F1B), forms the catalytic core in the F(1) domain (PubMed:37244256). 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

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