

# Anti-ATP5A1 / ATP Synthase Alpha Antibody (aa83-94)

Goat Anti Human Polyclonal Antibody

Catalog # ALS17934

## Product Information

<b>Application</b>	WB, IHC-P, E
<b>Primary Accession</b>	<a href="#">P25705</a>
<b>Predicted</b>	Human, Mouse, Rat, Rabbit, Hamster, Monkey, Pig, Sheep, Bovine, Horse
<b>Host</b>	Goat
<b>Clonality</b>	Polyclonal
<b>Calculated MW</b>	59751
<b>Concentration (mg/ml)</b>	0.5 mg/ml

## Additional Information

<b>Gene ID</b>	498
<b>Alias Symbol</b>	ATP5A1
<b>Other Names</b>	ATP5A1, ATP5AL2, ATP5A, HATP1, Mitochondrial ATP synthase, MOM2, ORM, OMR, ATPM
<b>Target/Specificity</b>	Human ATP5A1 / ATP Synthase Alpha. This antibody is expected to recognize all reported isoforms (NP_004037.1; NP_001244263.1; NP_001001935.1).
<b>Reconstitution &amp; Storage</b>	Immunoaffinity purified
<b>Precautions</b>	Anti-ATP5A1 / ATP Synthase Alpha Antibody (aa83-94) is for research use only and not for use in diagnostic or therapeutic procedures.

## Protein Information

<b>Name</b>	ATP5F1A ( <a href="#">HGNC:823</a> )
<b>Function</b>	<p>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:<a href="#">37244256</a>). These two domains are linked by a central stalk rotating inside the F(1) region and a stationary peripheral stalk (PubMed:<a href="#">37244256</a>). 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</p>

(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'.