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

Goat Anti Human Polyclonal Antibody
Catalog # ALS17934

Specification

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

Application	**WB, IHC-P, E**
Primary Accession	P25705
Predicted	**Human, Mouse, Rat, Rabbit, Hamster, Monkey, Pig, Sheep, Bovine, Horse**
Host	**Goat**
Clonality	**Polyclonal**
Calculated MW	**59751**
Dilution	**WB~~1:1000 IHC-P~~N/A E~~N/A**

Anti-ATP5A1 / ATP Synthase Alpha Antibody (aa83-94) - 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. This antibody is expected to recognize all reported isoforms (NP_004037.1; NP_001244263.1; NP_001001935.1).

Reconstitution & Storage
Immunoaffinity purified

Precautions
Anti-ATP5A1 / ATP Synthase Alpha Antibody (aa83-94) is for research use only and not for use in diagnostic or therapeutic procedures.

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

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

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

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