

**ATP5A1 Antibody (internal region, near N-Term)**  
**Peptide-affinity purified goat antibody**  
**Catalog # AF4082a****Specification**

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**ATP5A1 Antibody (internal region, near N-Term) - Product Information**

Application	WB
Primary Accession	<a href="#">P25705</a>
Other Accession	<a href="#">NP_004037.1</a> , <a href="#">NP_001244263.1</a> , <a href="#">NP_001001935.1</a> , <a href="#">498</a> , <a href="#">11946 (mouse)</a> , <a href="#">65262 (rat)</a>
Reactivity	Human, Mouse, Rat, Pig
Predicted	Dog, Cow
Host	Goat
Clonality	Polyclonal
Concentration	0.5 mg/ml
Isotype	IgG
Calculated MW	59751

**ATP5A1 Antibody (internal region, near N-Term) - Additional Information****Gene ID** 498**Other Names**

ATP synthase subunit alpha, mitochondrial, ATP5A1, ATP5A, ATP5AL2, ATPM

**Format**

0.5 mg/ml in Tris saline, 0.02% sodium azide, pH7.3 with 0.5% bovine serum albumin

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

ATP5A1 Antibody (internal region, near N-Term) is for research use only and not for use in diagnostic or therapeutic procedures.

**ATP5A1 Antibody (internal region, near N-Term) - Protein Information****Name** ATP5F1A ([HGNC:823](#))**Function**

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. Subunits alpha and beta form the catalytic core in F(1). Rotation of the central stalk against the surrounding alpha(3)beta(3) subunits leads to hydrolysis of ATP in three separate catalytic sites on the beta subunits. Subunit alpha does not bear the catalytic high-affinity ATP-binding sites (By similarity). Binds the bacterial siderophore enterobactin and can promote mitochondrial accumulation of enterobactin-derived iron ions (PubMed:<a href="http://www.uniprot.org/citations/30146159" target="\_blank">30146159</a>).

#### 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

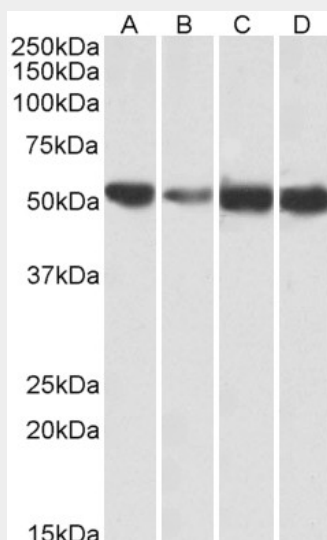
Fetal lung, heart, liver, gut and kidney. Expressed at higher levels in the fetal brain, retina and spinal cord

### ATP5A1 Antibody (internal region, near N-Term) - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

### ATP5A1 Antibody (internal region, near N-Term) - Images



AF4082a (0.01 µg/ml) staining of Human (A), fetal Mouse (B), adult Mouse (C) and adult Rat (D) Heart lysates (35 µg protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.

### ATP5A1 Antibody (internal region, near N-Term) - Background

This antibody is expected to recognize all reported isoforms (NP\_004037.1; NP\_001244263.1; NP\_001001935.1). Reported variants represent identical protein: NP\_001244264.1, NP\_001001935.1. Reported variants represent identical protein: NP\_004037.1, NP\_00100

#### **ATP5A1 Antibody (internal region, near N-Term) - References**

The putative tumour modifier gene ATP5A1 is not mutated in human colorectal cancer cell lines but expression levels correlate with TP53 mutations and chromosomal instability. Seth R, Keeley J, Abu-Ali G, Crook S, Jackson D, Ilyas M. Journal of clinical pathology 2009 Jul 62 (7): 598-603. PMID: 19261598