

**ATP5C1 Antibody (N-term) Blocking Peptide**  
**Synthetic peptide**  
**Catalog # BP9239a****Specification**

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**ATP5C1 Antibody (N-term) Blocking Peptide - Product Information**Primary Accession [P36542](#)**ATP5C1 Antibody (N-term) Blocking Peptide - Additional Information**

Gene ID 509

**Other Names**

ATP synthase subunit gamma, mitochondrial, F-ATPase gamma subunit, ATP5C1, ATP5C, ATP5CL1

**Target/Specificity**

The synthetic peptide sequence used to generate the antibody [AP9239a](/products/AP9239a) was selected from the N-term region of human ATP5C1. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

**Format**

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

**Precautions**

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

**ATP5C1 Antibody (N-term) Blocking Peptide - Protein Information**Name ATP5F1C ([HGNC:833](#))**Function**

Subunit gamma, 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 (PubMed: [37244256](http://www.uniprot.org/citations/37244256)). 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](http://www.uniprot.org/citations/37244256)). These two domains are linked by a central stalk rotating inside the F(1) region and a stationary peripheral stalk (PubMed: [37244256](http://www.uniprot.org/citations/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 central stalk subunit delta, is essential for the biogenesis of F(1) catalytic part of the ATP synthase complex namely in the formation of F1 assembly intermediate (PubMed:<a href="http://www.uniprot.org/citations/29499186" target="\_blank">29499186</a>).

**Cellular Location**

Mitochondrion inner membrane {ECO:0000250|UniProtKB:P05631}; Peripheral membrane protein {ECO:0000250|UniProtKB:P05631}; Matrix side {ECO:0000250|UniProtKB:P05631}

**Tissue Location**

Isoform Heart is expressed specifically in the heart and skeletal muscle, which require rapid energy supply. Isoform Liver is expressed in the brain, liver and kidney. Isoform Heart and Isoform Liver are expressed in the skin, intestine, stomach and aorta

**ATP5C1 Antibody (N-term) Blocking Peptide - Protocols**

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

- [Blocking Peptides](#)

**ATP5C1 Antibody (N-term) Blocking Peptide - Images****ATP5C1 Antibody (N-term) Blocking Peptide - Background**

ATP5C1 encodes a subunit of mitochondrial ATP synthase. Mitochondrial ATP synthase catalyzes ATP synthesis, utilizing an electrochemical gradient of protons across the inner membrane during oxidative phosphorylation. ATP synthase is composed of two linked multi-subunit complexes: the soluble catalytic core, F1, and the membrane-spanning component, Fo, comprising the proton channel. The catalytic portion of mitochondrial ATP synthase consists of 5 different subunits (alpha, beta, gamma, delta, and epsilon) assembled with a stoichiometry of 3 alpha, 3 beta, and a single representative of the other 3.

**ATP5C1 Antibody (N-term) Blocking Peptide - References**

Wheeler,H.E., et.al, PLoS Genet. 5 (10), E1000685 (2009)Wang,L., et.al, Cancer Epidemiol. Biomarkers Prev. 17 (12), 3558-3566 (2008)