

**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**

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. Part of the complex F(1) domain and the central stalk which is part of the complex rotary element. The gamma subunit protrudes into the catalytic domain formed of alpha(3)beta(3). 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.

**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, F<sub>1</sub>, and the membrane-spanning component, F<sub>o</sub>, 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)