

**ATP50 Antibody (N-term) Blocking Peptide**  
**Synthetic peptide**  
**Catalog # BP8563a****Specification**

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**ATP50 Antibody (N-term) Blocking Peptide - Product Information**Primary Accession [P48047](#)**ATP50 Antibody (N-term) Blocking Peptide - Additional Information**

Gene ID 539

**Other Names**

ATP synthase subunit O, mitochondrial, Oligomycin sensitivity conferral protein, OSCP, ATP5O, ATPO

**Target/Specificity**

The synthetic peptide sequence used to generate the antibody [AP8563a](/products/AP8563a) was selected from the N-term region of human ATP5O. 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.

**ATP50 Antibody (N-term) Blocking Peptide - Protein Information**Name ATP5PO ([HGNC:850](#))

Synonyms ATP5O, ATPO

**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(0) domain and the peripheral stalk, which acts as a stator to hold the catalytic alpha(3)beta(3) subcomplex and subunit a/ATP6 static relative to the rotary elements.

**Cellular Location**

Mitochondrion. Mitochondrion inner membrane

**ATP5O Antibody (N-term) Blocking Peptide - Protocols**

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

- [Blocking Peptides](#)

**ATP5O Antibody (N-term) Blocking Peptide - Images****ATP5O Antibody (N-term) Blocking Peptide - Background**

ATP5O is a component of the F-type ATPase found in the mitochondrial matrix. F-type ATPases are composed of a catalytic core and a membrane proton channel. This protein appears to be part of the connector linking these two components and may be involved in transmission of conformational changes or proton conductance.

**ATP5O Antibody (N-term) Blocking Peptide - References**

Wang,L., et.al., Cancer Epidemiol. Biomarkers Prev. 17 (12), 3558-3566 (2008)Contessi,S., et.al., J. Bioenerg. Biomembr. 39 (4), 291-300 (2007)