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ATP5O Antibody (N-term) Blocking Peptide
Synthetic peptide
Catalog # BP8563a

Specification

ATP5O Antibody (N-term) Blocking Peptide - Product Information

Primary Accession P48047

ATP5O 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 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.

ATP5O Antibody (N-term) Blocking Peptide - Protein Information

Name ATP5PO (HGNC:850)

Synonyms ATP5O, ATPO

Function
Subunit OSCP, 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). 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:<a href="http://www.uniprot.org/citations/37244256"

target="_blank">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). Part of the complex F(0) domain (PubMed:37244256). Part of the complex F(0) domain and the peripheric 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 (By similarity).

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)