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ATP5J Antibody (Center) Blocking peptide

Synthetic peptide
Catalog # BP12457c

Specification

ATP5J Antibody (Center) Blocking peptide - Product Information

Primary Accession P18859

ATP5J Antibody (Center) Blocking peptide - Additional Information

Gene ID 522

Other Names
ATP synthase-coupling factor 6, mitochondrial, ATPase subunit F6, ATP5J, ATP5A, ATPM

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.

ATP5J Antibody (Center) Blocking peptide - Protein Information

Name ATP5PF (HGNC:847)

Synonyms ATP5A, ATP5J, ATPM

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 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. Also involved in the restoration of oligomycin-sensitive ATPase activity to depleted F1-F0 complexes.

Cellular Location
Mitochondrion. Mitochondrion inner membrane.

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ATP5J Antibody (Center) Blocking peptide - Protocols

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

- Blocking Peptides

ATP5J Antibody (Center) Blocking peptide - Images

ATP5J Antibody (Center) Blocking peptide - Background

Mitochondrial ATP synthase catalyzes ATP synthesis,utilizing an electrochemical gradient of protons across the innermembrane during oxidative phosphorylation. It is composed of twolinked multi-subunit complexes: the soluble catalytic core, F1, andthe membrane-spanning component, Fo, which comprises the protonchannel. The F1 complex consists of 5 different subunits (alpha,beta, gamma, delta, and epsilon) assembled in a ratio of 3 alpha, 3beta, and a single representative of the other 3. The Fo seems tohave nine subunits (a, b, c, d, e, f, g, F6 and 8). This geneencodes the F6 subunit of the Fo complex, required for F1 and Fointeractions. Alternatively spliced transcript variants encodingdifferent isoforms have been identified for this gene. A pseudogeneexists on chromosome Yp11.

ATP5J Antibody (Center) Blocking peptide - References

Osanai, T., et al. Cardiovasc. Res. 81(4):780-787(2009)Wang, L., et al. Cancer Epidemiol. Biomarkers Prev. 17(12):3558-3566(2008)Kumagai, A., et al. Atherosclerosis 200(1):45-50(2008)Chai, S.B., et al. Circ. J. 71(5):693-697(2007)Morava, E., et al. Am. J. Med. Genet. A 140(8):863-868(2006)