

ATP5G1 Antibody (Center) Blocking Peptide
Synthetic peptide
Catalog # BP16683c**Specification**

ATP5G1 Antibody (Center) Blocking Peptide - Product InformationPrimary Accession [P05496](#)**ATP5G1 Antibody (Center) Blocking Peptide - Additional Information****Gene ID** 516**Other Names**

ATP synthase F(0) complex subunit C1, mitochondrial, ATP synthase lipid-binding protein, ATP synthase proteolipid P1, ATP synthase proton-transporting mitochondrial F(0) complex subunit C1, ATPase protein 9, ATPase subunit c, ATP5G1

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.

ATP5G1 Antibody (Center) Blocking Peptide - Protein Information**Name** ATP5MC1 ([HGNC:841](#))**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. A homomeric c-ring of probably 10 subunits is part of the complex rotary element.

Cellular Location

Mitochondrion membrane; Multi-pass membrane protein

ATP5G1 Antibody (Center) Blocking Peptide - Protocols

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

- [Blocking Peptides](#)

ATP5G1 Antibody (Center) Blocking Peptide - Images

ATP5G1 Antibody (Center) Blocking Peptide - Background

This gene 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, F_o, 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. The proton channel seems to have nine subunits (a, b, c, d, e, f, g, F6 and 8). This gene is one of three genes that encode subunit c of the proton channel. Each of the three genes have distinct mitochondrial import sequences but encode the identical mature protein. Alternatively spliced transcript variants encoding the same protein have been identified.

ATP5G1 Antibody (Center) Blocking Peptide - References

Vives-Bauza, C., et al. Mol. Biol. Cell 21(1):131-139(2010) Wang, H.L., et al. Cytogenet. Genome Res. 109 (4), 533 (2005) :Cross, R.L. Nature 427(6973):407-408(2004) Simpson, J.C., et al. EMBO Rep. 1(3):287-292(2000) Wang, H., et al. Nature 396(6708):279-282(1998)