

**ATP5F1 Blocking Peptide (Center)**

Synthetic peptide

Catalog # BP20527c

**Specification**

---

**ATP5F1 Blocking Peptide (Center) - Product Information**

Primary Accession

[P24539](#)**ATP5F1 Blocking Peptide (Center) - Additional Information**

Gene ID 515

**Other Names**ATP synthase F(0) complex subunit B1, mitochondrial, ATP synthase proton-transporting  
mitochondrial F(0) complex subunit B1, ATP synthase subunit b, ATPase subunit b, ATP5F1**Target/Specificity**

The synthetic peptide sequence is selected from aa 181-195 of Human ATP5F1

**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.

**ATP5F1 Blocking Peptide (Center) - Protein Information**Name ATP5PB ([HGNC:840](#))

Synonyms ATP5F1

**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.

## **ATP5F1 Blocking Peptide (Center) - Protocols**

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

- [Blocking Peptides](#)

## **ATP5F1 Blocking Peptide (Center) - Images**

## **ATP5F1 Blocking Peptide (Center) - Background**

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.

## **ATP5F1 Blocking Peptide (Center) - References**

Higuti T., et al. Biochem. Biophys. Res. Commun. 178:1014-1020(1991).  
Gregory S.G., et al. Nature 441:315-321(2006).  
Choudhary C., et al. Science 325:834-840(2009).  
Burkard T.R., et al. BMC Syst. Biol. 5:17-17(2011).