

PPIF Antibody (Center) Blocking Peptide

Synthetic peptide Catalog # BP16334c

Specification

PPIF Antibody (Center) Blocking Peptide - Product Information

Primary Accession

PPIF Antibody (Center) Blocking Peptide - Additional Information

Gene ID 10105

Other Names

Peptidyl-prolyl cis-trans isomerase F, mitochondrial, PPlase F, Cyclophilin D, CyP-D, CypD, Cyclophilin F, Mitochondrial cyclophilin, CyP-M, Rotamase F, PPIF, CYP3

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

P30405

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.

PPIF Antibody (Center) Blocking Peptide - Protein Information

Name PPIF

Synonyms CYP3

Function

PPlase that catalyzes the cis-trans isomerization of proline imidic peptide bonds in oligopeptides and may therefore assist protein folding (PubMed:20676357). Involved in regulation of the mitochondrial permeability transition pore (mPTP) (PubMed:26387735). It is proposed that its association with the mPTP is masking a binding site for inhibiting inorganic phosphate (Pi) and promotes the open probability of the mPTP leading to apoptosis or necrosis; the requirement of the PPlase activity for this function is debated (PubMed:26387735). In cooperation with mitochondrial p53/TP53 is involved in activating oxidative stress-induced necrosis (PubMed:22726440). Involved in modulation of mitochondrial membrane F(1)F(0) ATP synthase activity and regulation of mitochondrial matrix adenine nucleotide levels (By similarity). Has anti-apoptotic activity independently of mPTP and in cooperation with BCL2 inhibits cytochrome c-dependent apoptosis (PubMed:<a href="http://www.uniprot.org/citations/19228691"



target="_blank">19228691).

Cellular LocationMitochondrion matrix

PPIF Antibody (Center) Blocking Peptide - Protocols

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

Blocking Peptides

PPIF Antibody (Center) Blocking Peptide - Images

PPIF Antibody (Center) Blocking Peptide - Background

PPIF is a member of thepeptidyl-prolyl cis-trans isomerase (PPlase) family. PPlasescatalyze the cis-trans isomerization of proline imidic peptidebonds in oligopeptides and accelerate the folding of proteins. Thisprotein is part of the mitochondrial permeability transition porein the inner mitochondrial membrane. Activation of this pore isthought to be involved in the induction of apoptotic and necroticcell death.

PPIF Antibody (Center) Blocking Peptide - References

Rose, J.E., et al. Mol. Med. 16 (7-8), 247-253 (2010) :He, Y., et al. Invest. Ophthalmol. Vis. Sci. 49(11):4912-4922(2008)Lamesch, P., et al. Genomics 89(3):307-315(2007)Lin, D.T., et al. J. Biol. Chem. 277(34):31134-31141(2002)Bowles, K.R., et al. Genomics 67(2):109-127(2000)