

**Cyclophilin D Blocking Peptide**  
**Synthetic peptide**  
**Catalog # BP22108a****Specification**

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**Cyclophilin D Blocking Peptide - Product Information**

Primary Accession [Q08752](#)  
Other Accession [Q9CR16](#), [Q6DGG0](#)

**Cyclophilin D Blocking Peptide - Additional Information**

**Gene ID** 5481

**Other Names**

Peptidyl-prolyl cis-trans isomerase D, PPIase D, 5.2.1.8, 40 kDa peptidyl-prolyl cis-trans isomerase, Cyclophilin-40, CYP-40, Cyclophilin-related protein, Rotamase D, PPID, CYP40, CYPD

**Target/Specificity**

The synthetic peptide sequence is selected from aa 336-370 of HUMAN PPID

**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.

**Cyclophilin D Blocking Peptide - Protein Information**

**Name** PPID ([HGNC:9257](#))

**Synonyms** CYP40, CYPD

**Function**

PPIase that catalyzes the cis-trans isomerization of proline imidic peptide bonds in oligopeptides and may therefore assist protein folding (PubMed:<a href="http://www.uniprot.org/citations/11350175" target="\_blank">11350175</a>, PubMed:<a href="http://www.uniprot.org/citations/20676357" target="\_blank">20676357</a>). Proposed to act as a co- chaperone in HSP90 complexes such as in unligated steroid receptors heterocomplexes. Different co-chaperones seem to compete for association with HSP90 thus establishing distinct HSP90-co-chaperone- receptor complexes with the potential to exert tissue-specific receptor activity control. May have a preference for estrogen receptor complexes and is not found in glucocorticoid receptor complexes. May be involved in cytoplasmic dynein-dependent movement of the receptor from the cytoplasm to the nucleus. May regulate MYB by inhibiting its DNA- binding activity. Involved in regulation of AHR signaling by promoting

the formation of the AHR:ARNT dimer; the function is independent of HSP90 but requires the chaperone activity. Involved in regulation of UV radiation-induced apoptosis. Promotes cell viability in anaplastic lymphoma kinase-positive anaplastic large-cell lymphoma (ALK+ ALCL) cell lines.

**Cellular Location**

Cytoplasm. Nucleus, nucleolus. Nucleus, nucleoplasm

**Tissue Location**

Widely expressed.

**Cyclophilin D Blocking Peptide - Protocols**

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

- [Blocking Peptides](#)

**Cyclophilin D Blocking Peptide - Images****Cyclophilin D Blocking Peptide - Background**

PPIases accelerate the folding of proteins. It catalyzes the cis-trans isomerization of proline imidic peptide bonds in oligopeptides. Proposed to act as a co-chaperone in HSP90 complexes such as in unligated steroid receptors heterocomplexes. Different co-chaperones seem to compete for association with HSP90 thus establishing distinct HSP90-co-chaperone-receptor complexes with the potential to exert tissue-specific receptor activity control. May have a preference for estrogen receptor complexes and is not found in glucocorticoid receptor complexes. May be involved in cytoplasmic dynein-dependent movement of the receptor from the cytoplasm to the nucleus. May regulate MYB by inhibiting its DNA- binding activity. Involved in regulation of AHR signaling by promoting the formation of the AHR:ARNT dimer; the function is independent of HSP90 but requires the chaperone activity. Involved in regulation of UV radiation-induced apoptosis. Promotes cell viability in anaplastic lymphoma kinase-positive anaplastic large- cell lymphoma (ALK+ ALCL) cell lines. May be involved in hepatitis C virus (HCV) replication and release.

**Cyclophilin D Blocking Peptide - References**

Kieffer L.J.,et al.J. Biol. Chem. 268:12303-12310(1993).  
Yokoi H.,et al.Genomics 35:448-455(1996).  
Ota T.,et al.Nat. Genet. 36:40-45(2004).  
Mural R.J.,et al.Submitted (SEP-2005) to the EMBL/GenBank/DDBJ databases.  
Gevaert K.,et al.Nat. Biotechnol. 21:566-569(2003).