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PPID / Cyclophilin D Antibody (clone 4C7)

Mouse Monoclonal Antibody
Catalog # ALS16117

Specification

PPID / Cyclophilin D Antibody (clone 4C7) - Product Information

Application	**WB, IF, IHC**
Primary Accession	Q08752
Reactivity	**Human**
Host	**Mouse**
Clonality	**Monoclonal**
Calculated MW	**41kDa KDa**

PPID / Cyclophilin D Antibody (clone 4C7) - 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
Human PPID / Cyclophilin D

Reconstitution & Storage
Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.

Precautions
PPID / Cyclophilin D Antibody (clone 4C7) is for research use only and not for use in diagnostic or therapeutic procedures.

PPID / Cyclophilin D Antibody (clone 4C7) - 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:11350175, PubMed:20676357). 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.

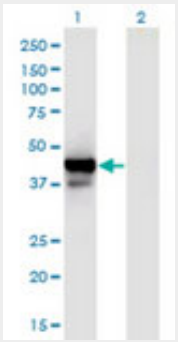
Volume
50 µl

PPID / Cyclophilin D Antibody (clone 4C7) - Protocols

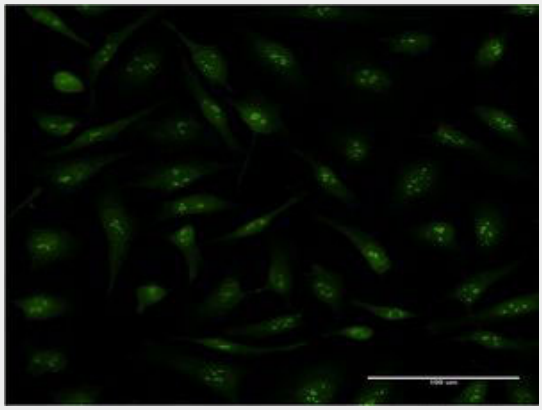
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

PPID / Cyclophilin D Antibody (clone 4C7) - Images

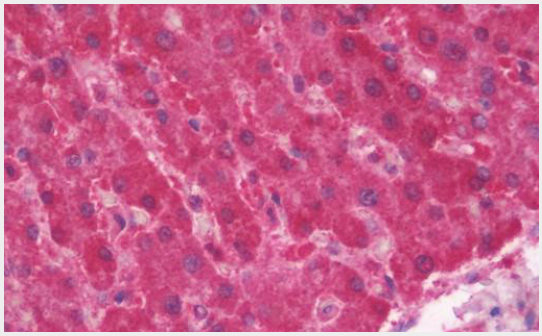


Western Blot analysis of PPID expression in transfected 293T cell line by PPID monoclonal...



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Immunofluorescence of monoclonal antibody to PPID on HeLa cell . [antibody concentration 10 ug/ml]



Anti-PPID / Cyclophilin D antibody IHC staining of human liver.

PPID / Cyclophilin D Antibody (clone 4C7) - 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.

PPID / Cyclophilin D Antibody (clone 4C7) - 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).