

Anti-PPID Antibody

Catalog # ABO10791

Specification

Anti-PPID Antibody - Product Information

ApplicationWB, IHC-PPrimary AccessionQ08752HostRabbitReactivityHuman, Mouse, RatClonalityPolyclonalFormatLyophilizedDescriptionRabbit IgG polyclonal antibody for Peptidyl-prolyl cis-trans isomerase D(PPID) detection. Testedwith WB, IHC-P in Human; Mouse; Rat.

Reconstitution Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-PPID Antibody - 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

Calculated MW 40764 MW KDa

Application Details Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Human, Rat, Mouse, By Heat
Western blot, 0.1-0.5 µg/ml, Human, Rat, Mouse

Subcellular Localization Cytoplasm. Nucleus, nucleolus. Nucleus, nucleoplasm.

Tissue Specificity Widely expressed.

Protein Name Peptidyl-prolyl cis-trans isomerase D(PPlase D)

Contents Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg Thimerosal, 0.05mg NaN3.

Immunogen

A synthetic peptide corresponding to a sequence at the C-terminus of human PPID(351-370aa KQKIKAQKDKEKAVYAKMFA), different from the related mouse and rat sequence by one amino acid.



Purification Immunogen affinity purified.

Cross Reactivity No cross reactivity with other proteins

Storage

At -20°C for one year. After r°Constitution, at 4°C for one month. It°Can also be aliquotted and stored frozen at -20°C for a longer time.Avoid repeated freezing and thawing.

Sequence Similarities Belongs to the cyclophilin-type PPlase family. PPlase D subfamily.

Anti-PPID Antibody - Protein Information

Name PPID (<u>HGNC:9257</u>)

Synonyms CYP40, CYPD

Function

PPlase 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.

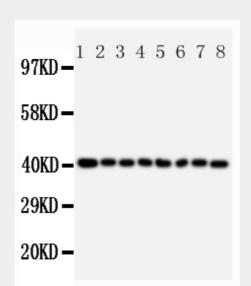
Anti-PPID Antibody - Protocols

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

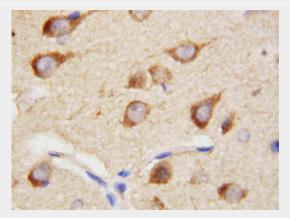
- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety



• <u>Cell Culture</u> Anti-PPID Antibody - Images



Anti-PPID antibody, ABO10791, Western blottingLane 1: Rat Brain Tissue LysateLane 2: Rat Pancreas Tissue LysateLane 3: Rat Liver Tissue LysateLane 4: JURKAT Cell LysateLane 5: RAJI Cell LysateLane 6: CEM Cell LysateLane 7: HL-60 Cell LysateLane 8: HT1080 Cell Lysate



Anti-PPID antibody, ABO10791, IHC(P)IHC(P): Rat Brain Tissue Anti-PPID Antibody - Background

Cyclophilin D, Peptidylprolyl isomerase D, also known as PPID, is an enzyme which in humans is encoded by the PPID gene. The protein encoded by this gene is a member of the peptidyl-prolyl cis-trans isomerase(PPIase) family. The Cyclophilin D(PPID) gene contains 10 exons and spans 14.2 kb of genomic DNA. By fluorescence in situ hybridization, the PPID gene is mapped to chromosome 4q31.3. PPIases catalyze the cis-trans isomerization of proline imidic peptide bonds in oligopeptides and accelerate the folding of proteins. This protein has been shown to possess PPIase activity and, similar to other family members, can bind to the immunosuppressant ciclosporin.