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Anti-PPID Picoband Antibody
Catalog # ABO12984

Specification

Anti-PPID Picoband Antibody - Product Information

Application	**WB, IHC-P, E**
Primary Accession	Q08752
Host	**Rabbit**
Reactivity	**Human, Mouse, Rat**
Clonality	**Polyclonal**
Format	**Lyophilized**

Description
Rabbit IgG polyclonal antibody for PPID detection. Tested with WB, IHC-P, Direct ELISA in Human;Mouse;Rat.

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

Anti-PPID Picoband 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

Application Details
Western blot, 0.1-0.5 µg/ml

 Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml

 Direct ELISA, 0.1-0.5 µg/ml

Subcellular Localization
Cytoplasm.

Tissue Specificity
Widely expressed.

Contents
Each vial contains 4mg Trehalose, 0.9mg NaCl, 0.2mg Na₂HPO₄, 0.05mg NaN₃.

Immunogen
E. coli-derived human PPID recombinant protein (Position: N306-A370).

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.

Anti-PPID Picoband Antibody - 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.

Anti-PPID Picoband Antibody - 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

Anti-PPID Picoband Antibody - Images

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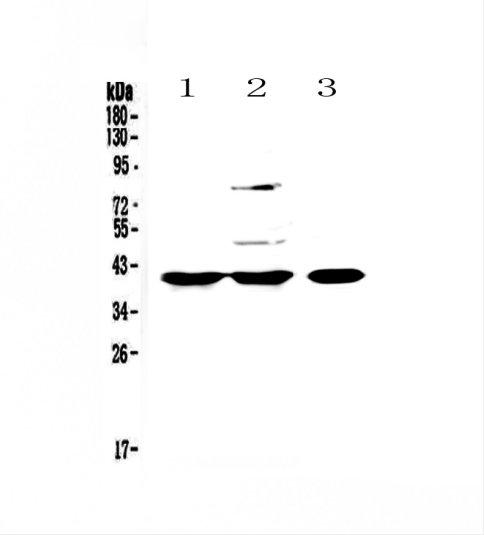

Figure 1. Western blot analysis of PPID using anti-PPID antibody (ABO12984). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions. Lane 1: rat spleen tissue lysates,Lane 2: rat liver tissue lysates,Lane 3: mouse testis tissue lysates.After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-PPID antigen affinity purified polyclonal antibody (Catalog # ABO12984) at 0.5 Î¼g/mL overnight at 4Â°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for PPID at approximately 41KD. The expected band size for PPID is at 41KD.

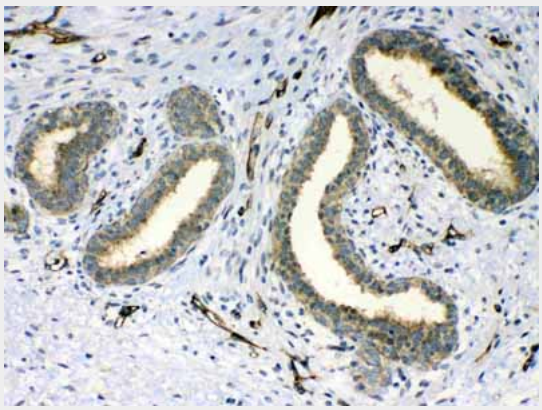

Figure 2. IHC analysis of PPID using anti-PPID antibody (ABO12984).PPID was detected in paraffin-embedded section of human mammary cancer tissue. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1Î¼g/ml rabbit anti-PPID Antibody (ABO12984) overnight at 4Â°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37Â°C. The tissue section was developed using Strepavidin-Biotin-Complex (SABC) with DAB as the chromogen.

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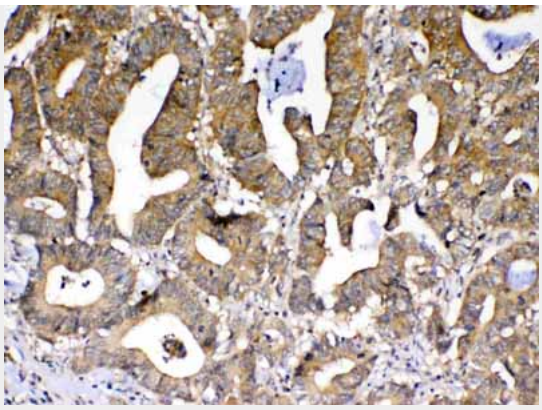

Figure 3. IHC analysis of PPID using anti-PPID antibody (ABO12984).PPID was detected in paraffin-embedded section of human rectal cancer tissue. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1Î¼g/ml rabbit anti-PPID Antibody (ABO12984) overnight at 4Â°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37Â°C. The tissue section was developed using Strepavidin-Biotin-Complex (SABC) with DAB as the chromogen.

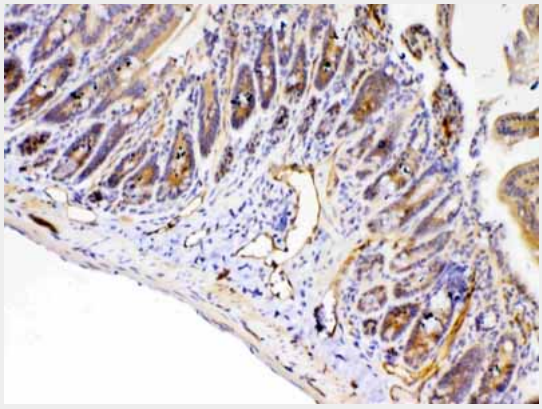

Figure 4. IHC analysis of PPID using anti-PPID antibody (ABO12984).PPID was detected in paraffin-embedded section of mouse intestine tissue. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1Î¼g/ml rabbit anti-PPID Antibody (ABO12984) overnight at 4Â°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37Â°C. The tissue section was developed using Strepavidin-Biotin-Complex (SABC) with DAB as the chromogen.

Anti-PPID Picoband 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.