

**Anti-Cyclophilin B PPIB Antibody Picoband™ (monoclonal, 11C11)**  
**Catalog # ABO14850****Specification****Anti-Cyclophilin B PPIB Antibody Picoband™ (monoclonal, 11C11) - Product Information**

Application	WB, IHC, IF, ICC, FC
Primary Accession	<a href="#">P23284</a>
Host	Mouse
Isotype	Mouse IgG1
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Format	Lyophilized

**Description**

Anti-Cyclophilin B PPIB Antibody Picoband™ (monoclonal, 11C11) . Tested in Flow Cytometry, IF, IHC, ICC, WB applications. This antibody reacts with Human, Mouse, Rat.

**Reconstitution**

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

**Anti-Cyclophilin B PPIB Antibody Picoband™ (monoclonal, 11C11) - Additional Information**

**Gene ID** 5479

**Other Names**

Peptidyl-prolyl cis-trans isomerase B, PPIase B, 5.2.1.8, CYP-S1, Cyclophilin B, Rotamase B, S-cyclophilin, SCYLP, PPIB, CYPB

**Calculated MW**

21 kDa KDa

**Application Details**

Western blot, 0.1-0.5 µg/ml<br> Immunohistochemistry (Paraffin-embedded Section), 0.5-1 µg/ml<br> Immunocytochemistry/Immunofluorescence, 2 µg/ml<br> Flow Cytometry, 1-3 µg/1x10<sup>6</sup> cells<br>

**Subcellular Localization**

Endoplasmic reticulum lumen. Melanosome.

**Contents**

Each vial contains 4mg Trehalose, 0.9mg NaCl, 0.2mg Na<sub>2</sub>HPO<sub>4</sub>, 0.05mg NaN<sub>3</sub>.

**Immunogen**

E. coli-derived human Cyclophilin B recombinant protein (Position: K158-E216).

**Cross Reactivity**

No cross-reactivity with other proteins.

**Storage**

**Store at -20°C for one year from date of**

receipt. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for six months. Avoid repeated freeze-thaw cycles.

## Anti-Cyclophilin B PPIB Antibody Picoband™ (monoclonal, 11C11) - Protein Information

**Name** PPIB

**Synonyms** CYPB

### Function

PPIase that catalyzes the cis-trans isomerization of proline imidic peptide bonds in oligopeptides and may therefore assist protein folding.

### Cellular Location

Virion. Note=(Microbial infection)

## Anti-Cyclophilin B PPIB Antibody Picoband™ (monoclonal, 11C11) - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

## Anti-Cyclophilin B PPIB Antibody Picoband™ (monoclonal, 11C11) - Images

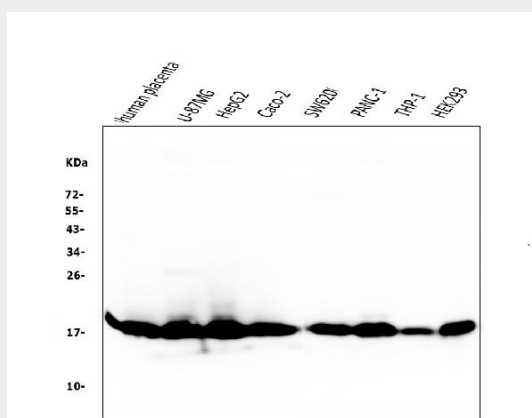


Figure 1. Western blot analysis of Cyclophilin B using anti-Cyclophilin B antibody (M03229-1). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions.

Lane 1: human placenta tissue lysates,  
Lane 2: U-87MG whole cell lysates,

Lane 3: HepG2 whole cell lysates,  
Lane 4: Caco-2 whole cell lysates,  
Lane 5: SW620 whole cell lysates,  
Lane 6: PANC-1 whole cell lysates,  
Lane 7: THP-1 whole cell lysates,  
Lane 8: HEK293 whole cell 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 mouse anti-Cyclophilin B antigen affinity purified monoclonal antibody (Catalog # M03229-1) at 0.5 µg/mL overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-mouse IgG-HRP secondary antibody at a dilution of 1:5000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1001) with Tanon 5200 system. A specific band was detected for Cyclophilin B at approximately 21KD. The expected band size for Cyclophilin B is at 21KD.

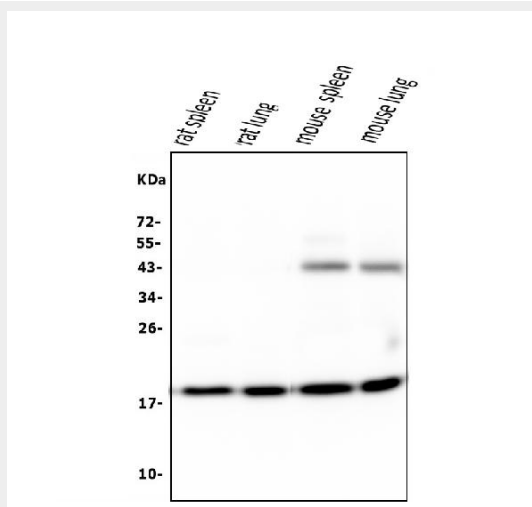


Figure 2. Western blot analysis of Cyclophilin B using anti-Cyclophilin B antibody (M03229-1). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions.

Lane 1: rat spleen tissue lysates,  
Lane 2: rat lung tissue lysates,  
Lane 3: mouse spleen tissue lysates,  
Lane 4: mouse lung 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 mouse anti-Cyclophilin B antigen affinity purified monoclonal antibody (Catalog # M03229-1) at 0.5 µg/mL overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-mouse IgG-HRP secondary antibody at a dilution of 1:5000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1001) with Tanon 5200 system. A specific band was detected for Cyclophilin B at approximately 21KD. The expected band size for Cyclophilin B is at 21KD.

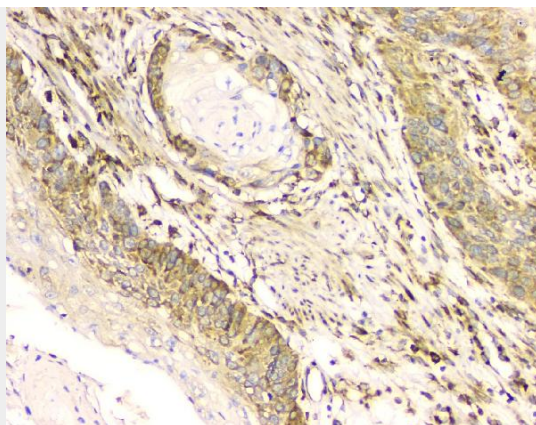


Figure 3. IHC analysis of Cyclophilin B using anti-Cyclophilin B antibody (M03229-1). Cyclophilin B was detected in paraffin-embedded section of human oesophagus squama cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1  $\mu$ g/ml mouse anti-Cyclophilin B Antibody (M03229-1) overnight at 4°C. Biotinylated goat anti-mouse IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) (Catalog # SA1021) with DAB as the chromogen.

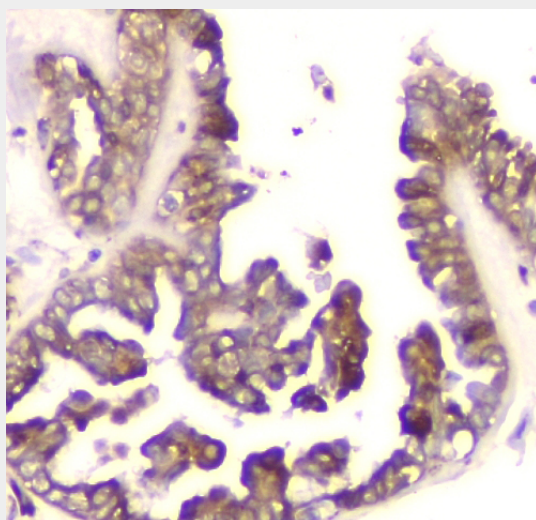


Figure 4. IHC analysis of Cyclophilin B using anti-Cyclophilin B antibody (M03229-1). Cyclophilin B was detected in paraffin-embedded section of human ovarian cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1  $\mu$ g/ml mouse anti-Cyclophilin B Antibody (M03229-1) overnight at 4°C. Biotinylated goat anti-mouse IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) (Catalog # SA1021) with DAB as the chromogen.

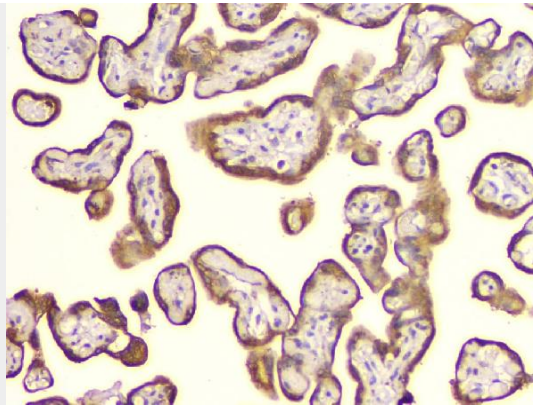


Figure 5. IHC analysis of Cyclophilin B using anti-Cyclophilin B antibody (M03229-1). Cyclophilin B was detected in paraffin-embedded section of human placenta tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1  $\mu$ g/ml mouse anti-Cyclophilin B Antibody (M03229-1) overnight at 4°C. Biotinylated goat anti-mouse IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) (Catalog # SA1021) with DAB as the chromogen.

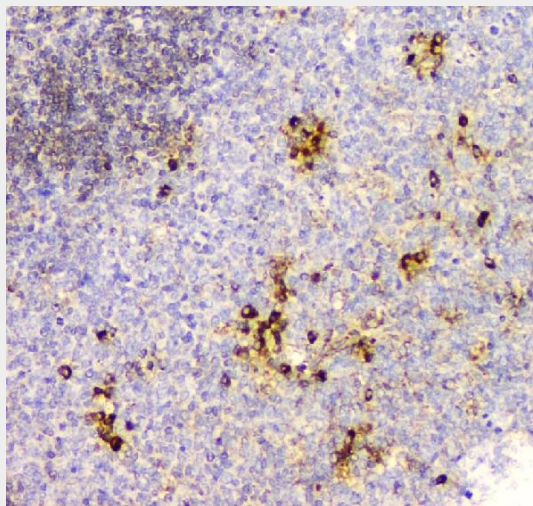


Figure 6. IHC analysis of Cyclophilin B using anti-Cyclophilin B antibody (M03229-1). Cyclophilin B was detected in paraffin-embedded section of human tonsil tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1  $\mu$ g/ml mouse anti-Cyclophilin B Antibody (M03229-1) overnight at 4°C. Biotinylated goat anti-mouse IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) (Catalog # SA1021) with DAB as the chromogen.



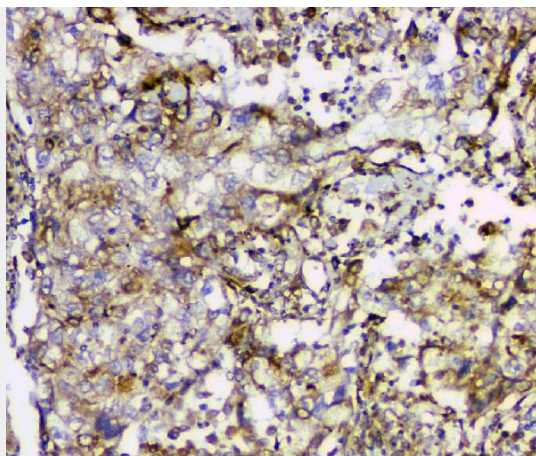


Figure 7. IHC analysis of Cyclophilin B using anti-Cyclophilin B antibody (M03229-1). Cyclophilin B was detected in paraffin-embedded section of human lung cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1  $\mu$ g/ml mouse anti-Cyclophilin B Antibody (M03229-1) overnight at 4°C. Biotinylated goat anti-mouse IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) (Catalog # SA1021) with DAB as the chromogen.

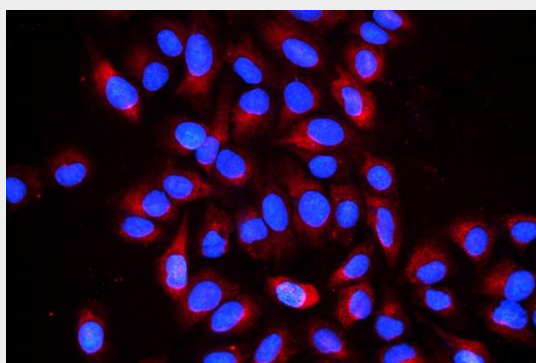


Figure 8. IHC analysis of Cyclophilin B using anti-Cyclophilin B antibody (M03229-1). Cyclophilin B was detected in immunocytochemical section of U2OS cell. Heat mediated antigen retrieval was performed in EDTA buffer (pH8.0, epitope retrieval solution). The cells were blocked with 10% goat serum. And then incubated with 2  $\mu$ g/ml mouse anti-Cyclophilin B Antibody (M03229-1) overnight at 4°C. Biotin conjugated goat anti-mouse IgG (BA1001) was used as secondary antibody and incubated for 30 minutes at 37°C. The section was developed using Cy3 Conjugated Avidin (BA1037). Visualize using a fluorescence microscope and filter sets appropriate for the label used.

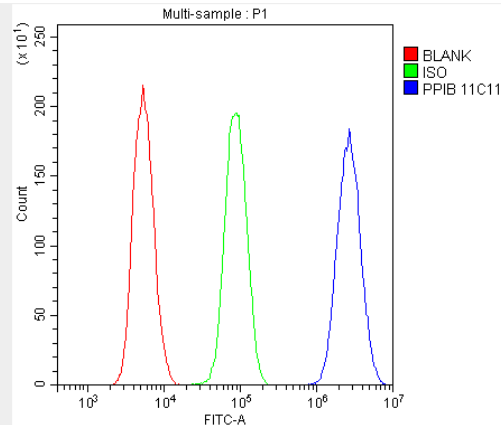


Figure 9. Flow Cytometry analysis of U2OS cells using anti-Cyclophilin B antibody (M03229-1). Overlay histogram showing U2OS cells stained with M03229-1 (Blue line). The cells were blocked with 10% normal goat serum. And then incubated with mouse anti-Cyclophilin B Antibody (M03229-1, 1  $\mu$ g/ $1 \times 10^6$  cells) for 30 min at 20°C. DyLight®488 conjugated goat anti-mouse IgG (BA1126, 5-10  $\mu$ g/ $1 \times 10^6$  cells) was used as secondary antibody for 30 minutes at 20°C. Isotype control antibody (Green line) was mouse IgG (1  $\mu$ g/ $1 \times 10^6$ ) used under the same conditions. Unlabelled sample (Red line) was also used as a control.

#### **Anti-Cyclophilin B PPIB Antibody Picoband™ (monoclonal, 11C11) - Background**

Peptidyl-prolyl cis-trans isomerase B, also known as CYPB, is an enzyme that in humans is encoded by the PPIB gene. This gene is mapped to 15q22.31. The protein encoded by this gene is a cyclosporine-binding protein and is mainly located within the endoplasmic reticulum. It is associated with the secretory pathway and released in biological fluids. This protein can bind to cells derived from T- and B-lymphocytes, and may regulate cyclosporine A-mediated immunosuppression. Variants have been identified in this protein that give rise to recessive forms of osteogenesis imperfecta.