

## Human peptidylprolyl isomerase A (cyclophilin A) ELISA Kit | PPIA elisa kit

Human cyclophilin A, PPIA/CYPA ELISA Kit

CATALOG #  
**AAA79957**

REACTIVITY  
**Human**

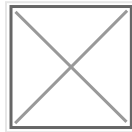
### PRODUCT SYNONYMS

peptidylprolyl isomerase A (cyclophilin A); Human cyclophilin A; PPIA/CYPA ELISA Kit; Human cyclophilin A (PPIA/CYPA) ELISA Kit; CYPA; CYPH; MGC117158; MGC12404; MGC23397; PPIase A; T cell cyclophilin; cyclosporin A-binding protein; peptidyl-prolyl cis-trans isomerase A; peptidylprolyl isomerase A; rotamase A; PPIA elisa kit

### PRODUCT SPECIFICATIONS

|                              |                                                                                                                                                                                                                                                                                                                           |
|------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Reactivity                   | Human                                                                                                                                                                                                                                                                                                                     |
| Specificity                  | This assay has high sensitivity and excellent specificity for detection of Human PPIA. No significant cross-reactivity or interference between Human PPIA and analogues was observed.                                                                                                                                     |
| Sequence Length              | 165                                                                                                                                                                                                                                                                                                                       |
| Samples                      | Serum, plasma, tissue homogenates, Cell lysates                                                                                                                                                                                                                                                                           |
| Detection Range              | 3.12 ng/ml-200 ng/ml                                                                                                                                                                                                                                                                                                      |
| Sensitivity                  | 0.78 ng/ml                                                                                                                                                                                                                                                                                                                |
| Intra-assay Precision        | Intra-assay Precision (Precision within an assay): CV% is less than 8%<br>Three samples of known concentration were tested twenty times on one plate to assess.<br>Inter-assay Precision (Precision between assays): CV% is less than 10%<br>Three samples of known concentration were tested in twenty assays to assess. |
| Detection Wavelength         | 450 nm                                                                                                                                                                                                                                                                                                                    |
| Sample Volume                | 50-100ul                                                                                                                                                                                                                                                                                                                  |
| Protein Biological Process 1 | Immunity                                                                                                                                                                                                                                                                                                                  |
| Protein Biological Process 3 | Host-virus interaction                                                                                                                                                                                                                                                                                                    |
| Preparation and Storage      | Unopened test kits should be stored at 2 to 8 degree C upon receipt. Please refer to pdf manual for further storage instructions.                                                                                                                                                                                         |

### IMAGES



Standard Curve (Sample)

## ADDITIONAL INFORMATION

### Related Product Information for PPIA elisa kit

**Introduction:** Cyclophilins, abbreviated Cyp, are proteins that bind to cyclosporine (cyclosporin A), an immunosuppressant which is usually used to suppress rejection after internal organ transplants. These proteins have peptidyl prolyl isomerase activity, which catalyzes the isomerization of peptide bonds from trans form to cis form at proline residues and facilitates protein folding. Cyclophilin A (CyPA) is an abundant intracellular protein that is considered to be the main target of the immunosuppressive drug cyclosporine A. Human Cyclophilin A exists in cytosol, has a beta barrel structure with two alpha helices and a beta-sheet. Other cyclophilins have similar structures to cyclophilin A. The cyclosporin A-cyclophilin A complex inhibits a calcium/calmodulin-dependent phosphatase, calcineurin, the inhibition of which is thought to suppress organ rejection by halting the production of the pro-inflammatory molecules TNF alpha and interleukin 2.

**Principle of the Assay:** The microtiter plate provided in this kit has been pre-coated with an antibody specific to CyPA. Standards or samples are then added to the appropriate microtiter plate wells with a biotin conjugated antibody preparation specific for CyPA and Avidin conjugated to Horseradish Peroxidase (HRP) is added to each microplate well and incubated. Then a TMB (3,3',5,5' tetramethyl-benzidine) substrate solution is added to each well. Only those wells that contain CyPA, biotin-conjugated antibody and enzyme-conjugated Avidin will exhibit a change in color. The enzyme-substrate reaction is terminated by the addition of a sulphuric acid solution and the color change is measured spectrophotometrically at a wavelength of 450 nm +/- 2 nm. The concentration of CyPA in the samples is then determined by comparing the O.D. of the samples to the standard curve.

## NCBI AND UNIPROT INFORMATION

|                                  |                                                                                                                                                                                                                                |
|----------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| NCBI GI #                        | <a href="#">10863927</a>                                                                                                                                                                                                       |
| NCBI GeneID                      | <a href="#">5478</a>                                                                                                                                                                                                           |
| NCBI Accession #                 | <a href="#">NP_066953.1</a>                                                                                                                                                                                                    |
| NCBI GenBank Nucleotide #        | <a href="#">NM_021130.4</a>                                                                                                                                                                                                    |
| UniProt Accession #              | <a href="#">P62937</a> ; <a href="#">P05092</a> ; <a href="#">Q3KQW3</a> ; <a href="#">Q6IBU5</a> ; <a href="#">Q96IX3</a> ; <a href="#">Q9BRU4</a> ; <a href="#">Q9BTY9</a> ; <a href="#">Q9UC61</a> ; <a href="#">A8K220</a> |
| Molecular Weight                 | 18,012 Da                                                                                                                                                                                                                      |
| NCBI Official Full Name          | peptidyl-prolyl cis-trans isomerase A isoform 1                                                                                                                                                                                |
| NCBI Official Synonym Full Names | peptidylprolyl isomerase A (cyclophilin A)                                                                                                                                                                                     |
| NCBI Official Symbol             | PPIA                                                                                                                                                                                                                           |
| NCBI Official Synonym Symbols    | CYPA; CYPH; HEL-S-69p                                                                                                                                                                                                          |
| NCBI Protein Information         | peptidyl-prolyl cis-trans isomerase A; PPIase A; rotamase A; T cell cyclophilin; cyclosporin A-binding protein; epididymis secretory sperm binding protein Li 69p                                                              |
| UniProt Protein Name             | Peptidyl-prolyl cis-trans isomerase A                                                                                                                                                                                          |
| UniProt Gene Name                | <b>PPIA</b>                                                                                                                                                                                                                    |
| UniProt Synonym Gene Names       | CYPA; PPIase A                                                                                                                                                                                                                 |
| UniProt Entry Name               | PPIA_HUMAN                                                                                                                                                                                                                     |

**For Research Use Only.** Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

AAA Biotech | Tel: +1 (619) 604-9440 | Fax: +1 (619) 604-9441 | [contact@aaabiotech.com](mailto:contact@aaabiotech.com)

Online datasheet: <https://stage.aaabiotech.com/ppia-human-elisa-kits/peptidylprolyl-isomerase-a-cyclophilin-a/79957>