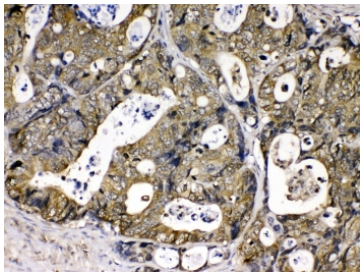
Cyclophilin A Antibody / Protein Folding Chaperone Antibody (R32747)

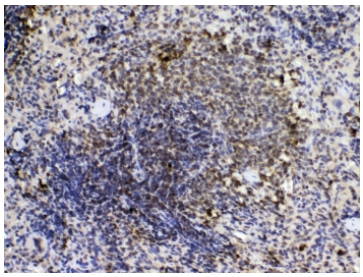
Catalog No.	Formulation	Size
R32747	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

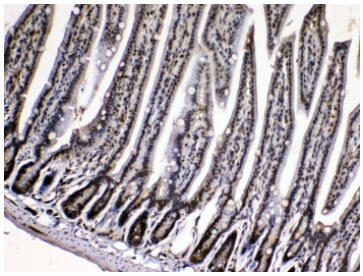
Availability	1-3 business days
Species Reactivity	Human, Mouse, Rat
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity
Buffer	Lyophilized from 1X PBS with 2% Trehalose and 0.025% sodium azide
UniProt	P62937
Localization	Cytoplasmic, secreted
Applications	Western blot: 0.5-1ug/ml Immunohistochemistry (FFPE): 1-2ug/ml Flow cytometry: 1-3ug/10^6 cells Immunofluorescence/Immunocytochemistry: 2-4ug/ml
Limitations	This Cyclophilin A Antibody / Protein Folding Chaperone Antibody is available for research use only.



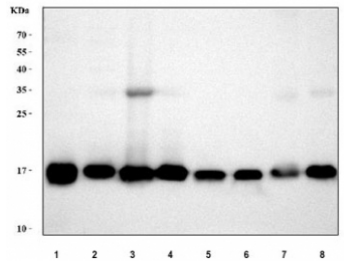
Cyclophilin A Antibody Intestinal Cancer IHC. Immunohistochemical staining of FFPE human intestinal cancer tissue using Cyclophilin A Antibody / Protein Folding Chaperone Antibody demonstrates strong cytoplasmic HRP-DAB brown staining within malignant epithelial cells. The staining pattern is consistent with expression of Cyclophilin A (PPIA), a peptidyl-prolyl cis-trans isomerase that functions as a molecular chaperone involved in protein folding, cellular stress responses, and signal transduction. Positive immunoreactivity throughout the tumor cell population highlights the widespread expression of Cyclophilin A in metabolically active cells and supports its role in maintaining protein homeostasis under conditions of rapid growth and cellular remodeling. Required HIER: steam section in pH6 citrate buffer for 20 min and allow to cool prior to testing.



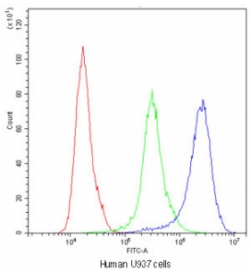
Cyclophilin A Antibody Rat Spleen IHC. Immunohistochemical staining of FFPE rat spleen tissue using Cyclophilin A Antibody / Protein Folding Chaperone Antibody demonstrates cytoplasmic HRP-DAB brown staining within splenic cell populations, including cells distributed throughout lymphoid-rich regions. The staining pattern is consistent with expression of Cyclophilin A (PPIA), a highly conserved peptidyl-prolyl cis-trans isomerase that functions as a molecular chaperone involved in protein folding, intracellular signaling, and cellular stress responses. Positive immunoreactivity within splenic tissue supports the widespread expression of Cyclophilin A in immune and metabolically active cells, reflecting its important role in maintaining protein homeostasis, regulating cellular adaptation, and supporting normal physiological function. Required HIER: steam section in pH6 citrate buffer for 20 min and allow to cool prior to testing.



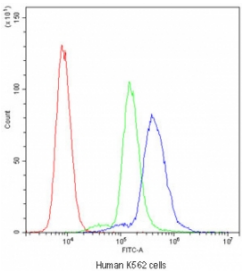
Cyclophilin A Antibody Mouse Intestine IHC. Immunohistochemical staining of FFPE mouse intestine tissue using Cyclophilin A Antibody / Protein Folding Chaperone Antibody demonstrates cytoplasmic HRP-DAB brown staining within intestinal epithelial cells and cells distributed throughout the intestinal mucosa. The staining pattern is consistent with expression of Cyclophilin A (PPIA), a highly conserved peptidyl-prolyl cis-trans isomerase that functions as a molecular chaperone involved in protein folding, protein quality control, and cellular stress adaptation. Positive immunoreactivity within the intestinal tissue highlights the widespread expression of Cyclophilin A in metabolically active cell populations and supports its role in maintaining cellular homeostasis and regulating responses to physiological stress. Required HIER: steam section in pH6 citrate buffer for 20 min and allow to cool prior to testing.



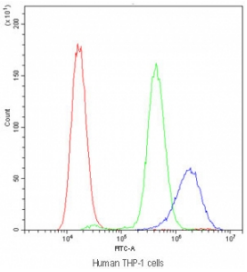
Cyclophilin A Antibody Human Mouse Rat WB. Western blot analysis of 1) human THP-1, 2) human HepG2, 3) human MOLT4, 4) human Daudi, 5) rat lung, 6) rat brain, 7) mouse lung, and 8) mouse brain tissue lysates using Cyclophilin A Antibody / Protein Folding Chaperone Antibody. A strong immunoreactive band is detected at approximately 18 kDa across all tested human, rat, and mouse samples, consistent with the expected molecular weight of Cyclophilin A (PPIA). Cyclophilin A is a highly conserved peptidyl-prolyl cis-trans isomerase that functions as a molecular chaperone involved in protein folding, intracellular signaling, and cellular stress responses. The broad expression observed across multiple tissues and species is consistent with the ubiquitous cellular distribution of Cyclophilin A and supports the utility of this antibody for cross-species western blot applications. Predicted molecular weight: ~18 kDa. Observed molecular weight: ~18 kDa. A faint higher molecular weight band detected in some human samples may represent post-translationally modified Cyclophilin A, protein complexes, or minor nonspecific reactivity.



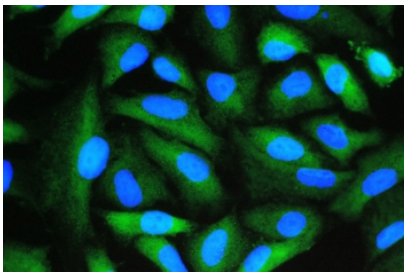
Cyclophilin A Antibody U937 Flow Cytometry. Flow cytometric analysis of human U937 cells stained with Cyclophilin A Antibody / Protein Folding Chaperone Antibody demonstrates a clear rightward shift of the antibody-stained population (blue) relative to both the isotype control (green) and unstained cells (red). The observed fluorescence profile is consistent with expression of Cyclophilin A (PPIA), a highly conserved peptidyl-prolyl cis-trans isomerase that functions as a molecular chaperone involved in protein folding, intracellular signaling, and cellular stress responses. The distinct separation between the Cyclophilin A antibody and control populations supports specific detection of endogenous Cyclophilin A by flow cytometry. Cells were blocked with goat serum and stained with Cyclophilin A antibody at 1 ug/10^6 cells. Red = cells alone, Green = isotype control, Blue = Cyclophilin A antibody.



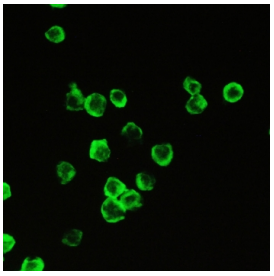
Cyclophilin A Antibody K562 Flow Cytometry. Flow cytometric analysis of human K562 cells stained with Cyclophilin A Antibody / Protein Folding Chaperone Antibody demonstrates a distinct rightward shift of the positive population (blue) relative to both the isotype control (green) and unstained cells (red). The observed fluorescence profile is consistent with expression of Cyclophilin A (PPIA), a ubiquitously expressed peptidyl-prolyl cis-trans isomerase that functions as a molecular chaperone involved in protein folding, protein trafficking, and cellular stress response pathways. The clear separation between the antibody-stained and control populations supports specific detection of endogenous Cyclophilin A by flow cytometry. Cells were blocked with goat serum and stained with Cyclophilin A antibody at 1 ug/10^6 cells. Red = cells alone, Green = isotype control, Blue = Cyclophilin A antibody.



Cyclophilin A Antibody THP-1 Flow Cytometry. Flow cytometric analysis of human THP-1 cells stained with Cyclophilin A Antibody / Protein Folding Chaperone Antibody demonstrates a pronounced rightward shift of the antibody-stained population (blue) compared with both the isotype control (green) and unstained cells (red). The observed fluorescence pattern is consistent with expression of Cyclophilin A (PPIA), a highly conserved peptidyl-prolyl cis-trans isomerase that functions as a molecular chaperone involved in protein folding, intracellular signaling, and cellular stress response pathways. The clear separation between positive and control populations supports specific detection of endogenous Cyclophilin A by flow cytometry. Cells were blocked with goat serum and stained with Cyclophilin A antibody at 1 ug/10^6 cells. Red = cells alone, Green = isotype control, Blue = Cyclophilin A antibody.



Cyclophilin A Antibody IF. Immunofluorescent staining demonstrates Cyclophilin A (PPIA) expression as diffuse cytoplasmic green fluorescence throughout the cell population, with relative exclusion from DAPI-stained blue nuclei. The staining pattern is consistent with the known intracellular localization of Cyclophilin A, a highly abundant peptidyl-prolyl cis-trans isomerase that functions as a molecular chaperone involved in protein folding, protein trafficking, and cellular stress response pathways. Robust cytoplasmic immunoreactivity supports the widespread expression of Cyclophilin A in metabolically active cells and demonstrates the utility of this antibody for immunofluorescence applications. Nuclei are counterstained with DAPI (blue).



Cyclophilin A Antibody THP-1 IF. Immunofluorescent staining of FFPE human THP-1 cells using Cyclophilin A Antibody / Protein Folding Chaperone Antibody demonstrates strong green fluorescence predominantly within the cytoplasmic compartment of the cells. The staining pattern is consistent with expression of Cyclophilin A (PPIA), a highly abundant peptidyl-prolyl cis-trans isomerase that functions as a molecular chaperone involved in protein folding, intracellular signaling, and cellular stress response pathways. Robust cytoplasmic immunoreactivity supports the known intracellular localization of Cyclophilin A and demonstrates the utility of this antibody for immunofluorescence detection in FFPE cell preparations. HIER: steam section in pH6 citrate buffer for 20 min. Cyclophilin A antibody concentration: 2 ug/ml. Green = Cyclophilin A antibody staining.

Description

Cyclophilin A Antibody / Protein Folding Chaperone Antibody recognizes Cyclophilin A (PPIA), a highly conserved peptidyl-prolyl cis-trans isomerase that functions as one of the most abundant intracellular molecular chaperones in eukaryotic cells. Cyclophilin A catalyzes the isomerization of peptide bonds preceding proline residues, an enzymatic activity that accelerates protein folding and promotes proper protein conformation. Through its role in protein maturation and quality control, Cyclophilin A contributes to the maintenance of cellular homeostasis and supports a wide range of essential biological processes.

Cyclophilin A Antibody is widely used for studying protein folding, molecular chaperone activity, and cellular stress responses. Newly synthesized proteins often require assistance in achieving their correct three-dimensional structure, and Cyclophilin A facilitates this process by reducing kinetic barriers associated with proline isomerization. In addition to its enzymatic activity, Cyclophilin A participates in protein trafficking, complex assembly, and stabilization of cellular proteins under normal and stress-associated conditions. Because of its abundance and functional versatility, Cyclophilin A is considered a central regulator of protein quality control pathways.

Cyclophilin A Antibody is also valuable for investigations of signal transduction and cellular adaptation. Cyclophilin A interacts with numerous intracellular proteins and influences pathways involved in proliferation, differentiation, apoptosis, and stress-induced responses. Under conditions such as oxidative stress, inflammation, hypoxia, and tissue injury, Cyclophilin A expression and activity can be altered to help maintain cellular integrity and promote survival. These functions have established Cyclophilin A as an important marker for studies of cellular resilience and stress adaptation mechanisms.

Cyclophilin A Antibody has significant relevance in immunology and inflammation research. Cyclophilin A was originally identified through its ability to bind the immunosuppressive drug cyclosporin A, an interaction that contributes to the drug's effects on T-cell activation and immune regulation. Beyond its intracellular functions, Cyclophilin A can be released into the extracellular environment where it acts as a signaling molecule capable of influencing inflammatory responses, leukocyte recruitment, and tissue remodeling. As a result, Cyclophilin A has become an important target for investigations of immune signaling and inflammatory disease mechanisms.

Cyclophilin A Antibody is additionally useful for studies involving cardiovascular disease, cancer biology, infectious disease, and metabolic regulation. Elevated Cyclophilin A expression has been reported in numerous pathological conditions where it may influence cellular proliferation, migration, oxidative stress responses, and disease progression. Cyclophilin A has also been implicated in host-pathogen interactions and viral replication pathways, further expanding its significance in translational research. Consequently, Cyclophilin A continues to attract attention as both a biomarker and potential therapeutic target in a wide variety of disease settings.

Cyclophilin A Antibody supports research involving protein folding, molecular chaperones, cellular stress responses, inflammation, signal transduction, cardiovascular biology, oncology, and infectious disease. Because Cyclophilin A integrates protein quality control mechanisms with diverse cellular signaling pathways, it remains one of the most extensively studied immunophilins and an important target for both basic and translational biomedical research.

Researchers studying protein folding, molecular chaperones, cellular stress responses, and signal transduction may also be interested in our comprehensive collection of Cell Biology Antibodies.

Application Notes

Optimal dilution of the Cyclophilin A Antibody / Protein Folding Chaperone Antibody should be determined by the researcher.

Immunogen

Amino acids T116-E165 from the human protein were used as the immunogen for the Cyclophilin A antibody.

Storage

After reconstitution, the Cyclophilin A antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.

Alternate Names

Cyclophilin A Antibody, PPIA Antibody, Peptidyl-Prolyl Isomerase A Antibody, Protein Folding Chaperone Antibody, Molecular Chaperone Antibody, Cyclosporin A Binding Protein Antibody, Rotamase A Antibody, Immunophilin Antibody

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