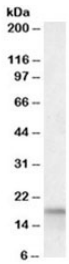
Cyclophilin A Antibody (R33958)

Catalog No.	Formulation	Size
R33958-100UG	0.5 mg/ml in 1X TBS, pH7.3, with 0.5% BSA (US sourced) and 0.02% sodium azide	100 ug

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human
Predicted Reactivity	Mouse, Rat, Dog, Pig, Cow
Format	Antigen affinity purified
Host	Goat
Clonality	Polyclonal (goat origin)
Isotype	Goat Ig
Purity	Antigen affinity
Gene ID	5478
Localization	Cytoplasmic, secreted
Applications	Western blot: 0.3-1ug/ml ELISA (peptide) LOD: 1:8000
Limitations	This Cyclophilin A antibody is available for research use only.



Cyclophilin A Antibody Human Lymph WB. Western blot analysis of human lymph lysate using Cyclophilin A Antibody / Protein Folding Chaperone Antibody demonstrates a distinct immunoreactive band at approximately 18 kDa, 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 response pathways. Detection of endogenous Cyclophilin A in lymph-derived tissue is consistent with its abundant expression in immune cell populations and its established roles in immune regulation, protein homeostasis, and inflammatory signaling.

Description

Cyclophilin A Antibody recognizes Cyclophilin A (PPIA), a highly conserved peptidyl-prolyl cis-trans isomerase that functions as an essential molecular chaperone in eukaryotic cells. Cyclophilin A catalyzes the isomerization of peptide

bonds preceding proline residues, a rate-limiting step in the folding of many proteins. Through this enzymatic activity, Cyclophilin A promotes proper protein conformation, supports protein stability, and contributes to the maintenance of cellular protein homeostasis. Because of its abundance and broad functional importance, Cyclophilin A is one of the most extensively studied members of the immunophilin protein family.

Cyclophilin A Antibody is widely used for investigating protein folding, intracellular signaling, and cellular stress responses. In addition to facilitating the maturation of newly synthesized proteins, Cyclophilin A participates in protein trafficking, assembly of multiprotein complexes, and regulation of numerous signaling pathways. Expression of Cyclophilin A is frequently elevated in cells experiencing oxidative stress, inflammatory stimulation, hypoxia, or other physiological challenges, highlighting its role in cellular adaptation and survival mechanisms.

Cyclophilin A Antibody is also valuable for studies of immune regulation and inflammation. Cyclophilin A was originally identified as the intracellular receptor for the immunosuppressive drug cyclosporin A and remains an important mediator of immune signaling pathways. Beyond its intracellular functions, Cyclophilin A can be secreted by activated cells and act as an extracellular signaling molecule that influences inflammatory responses, leukocyte migration, and tissue remodeling. These activities have made Cyclophilin A an important target in immunology and inflammatory disease research.

Cyclophilin A Antibody has significant relevance in cancer biology, cardiovascular disease, infectious disease, and metabolic research. Altered expression of Cyclophilin A has been reported in numerous pathological conditions where it may contribute to cell proliferation, migration, angiogenesis, and stress adaptation. Cyclophilin A has also been implicated in host-pathogen interactions and viral replication pathways, further expanding its importance in translational and therapeutic research. Consequently, Cyclophilin A continues to serve as both a valuable biomarker and a potential therapeutic target across multiple disease areas.

Cyclophilin A Antibody supports research involving molecular chaperones, protein folding, cellular stress responses, inflammation, signal transduction, oncology, cardiovascular biology, and infectious disease. As a central regulator of protein homeostasis and cellular adaptation, Cyclophilin A remains an important target for understanding both normal cellular physiology and disease-associated signaling mechanisms.

Researchers studying protein folding, molecular chaperones, cellular stress responses, and Cyclophilin A signaling pathways may also be interested in our Cyclophilin A Antibody / Protein Folding Chaperone Antibody.

Application Notes

Optimal dilution of the Cyclophilin A antibody should be determined by the researcher.

Immunogen

Amino acids ERFGSRNGKTSKK were used as the immunogen for this Cyclophilin A antibody.

Storage

Aliquot and store the Cyclophilin A antibody at -20oC.

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