10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

KD-Validated Anti-Peptidylprolyl Isomerase A Rabbit Monoclonal Antibody

Rabbit monoclonal antibody
Catalog # AGI1635

Specification

KD-Validated Anti-Peptidylprolyl Isomerase A Rabbit Monoclonal Antibody - Product Information

Application	**WB, FC, ICC**
Primary Accession	P62937
Reactivity	**Human, Mouse**
Clonality	**Monoclonal**
Isotype	**Rabbit IgG**
Calculated MW	**Predicted, 18 kDa , observed , 18 kDa KDa**
Gene Name	**PPIA**
Aliases	**Peptidylprolyl Isomerase A; CYPA; Peptidyl-Prolyl Cis-Trans Isomerase A; Cyclosporin A-Binding Protein; Cyclophilin A; Rotamase A; EC 5.2.1.8; PPIase A; Epididymis Secretory Sperm Binding Protein Li 69p; Peptidylprolyl Isomerase A (Cyclophilin A); T Cell Cyclophilin; HEL-S-69p; CYPH**
Immunogen	**A synthesized peptide derived from human Cyclophilin A**

KD-Validated Anti-Peptidylprolyl Isomerase A Rabbit Monoclonal Antibody - Additional Information

Gene ID	**5478**

Other Names
Peptidyl-prolyl cis-trans isomerase A, PPIase A, 5.2.1.8, Cyclophilin A, Cyclosporin A-binding protein, Rotamase A, Peptidyl-prolyl cis-trans isomerase A, N-terminally processed, PPIA, CYPA

KD-Validated Anti-Peptidylprolyl Isomerase A Rabbit Monoclonal Antibody - Protein Information

Name PPIA

Synonyms CYPA

Function
Catalyzes the cis-trans isomerization of proline imidic peptide bonds in oligopeptides (PubMed:2001362, PubMed:20676357, PubMed:21245143, PubMed:21593166, PubMed:25678563). Exerts a strong chemotactic effect on leukocytes partly through activation of one of its membrane

receptors BSG/CD147, initiating a signaling cascade that culminates in MAPK/ERK activation (PubMed:11943775, PubMed:21245143). Activates endothelial cells (ECs) in a pro-inflammatory manner by stimulating activation of NF-kappa-B and ERK, JNK and p38 MAP-kinases and by inducing expression of adhesion molecules including SELE and VCAM1 (PubMed:15130913). Induces apoptosis in ECs by promoting the FOXO1-dependent expression of CCL2 and BCL2L11 which are involved in EC chemotaxis and apoptosis (PubMed:31063815). In response to oxidative stress, initiates proapoptotic and antiapoptotic signaling in ECs via activation of NF-kappa-B and AKT1 and up-regulation of antiapoptotic protein BCL2 (PubMed:23180369). Negatively regulates MAP3K5/ASK1 kinase activity, autophosphorylation and oxidative stress-induced apoptosis mediated by MAP3K5/ASK1 (PubMed:26095851). Necessary for the assembly of TARDBP in heterogeneous nuclear ribonucleoprotein (hnRNP) complexes and regulates TARDBP binding to RNA UG repeats and TARDBP-dependent expression of HDAC6, ATG7 and VCP which are involved in clearance of protein aggregates (PubMed:25678563). Plays an important role in platelet activation and aggregation (By similarity). Regulates calcium mobilization and integrin ITGA2B:ITGB3 bidirectional signaling via increased ROS production as well as by facilitating the interaction between integrin and the cell cytoskeleton (By similarity). Binds heparan sulfate glycosaminoglycans (PubMed:11943775). Inhibits replication of influenza A virus (IAV) (PubMed:19207730). Inhibits ITCH/AIP4-mediated ubiquitination of matrix protein 1 (M1) of IAV by impairing the interaction of ITCH/AIP4 with M1, followed by the suppression of the nuclear export of M1, and finally reduction of the replication of IAV (PubMed:22347431, PubMed:30328013).

Cellular Location
Cytoplasm. Secreted. Nucleus Note=Secretion occurs in response to oxidative stress in vascular smooth muscle through a vesicular secretory pathway that includes Rho GTPase signaling, actin remodeling, and myosin II activation

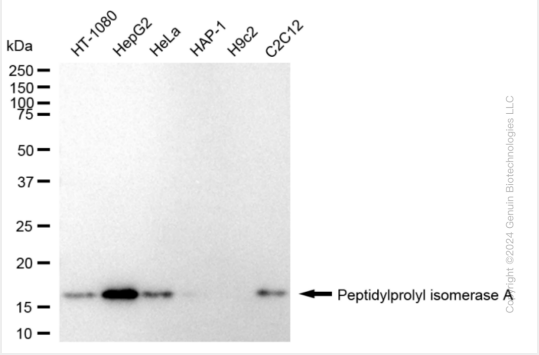
KD-Validated Anti-Peptidylprolyl Isomerase A Rabbit Monoclonal Antibody - Protocols

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

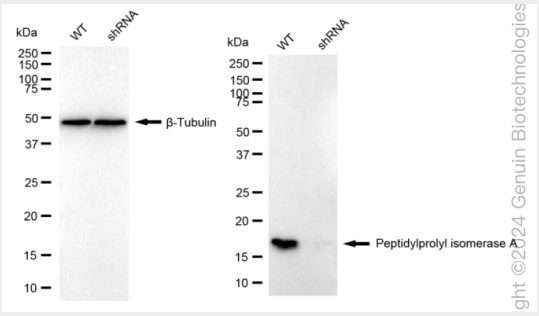
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

KD-Validated Anti-Peptidylprolyl Isomerase A Rabbit Monoclonal Antibody - Images

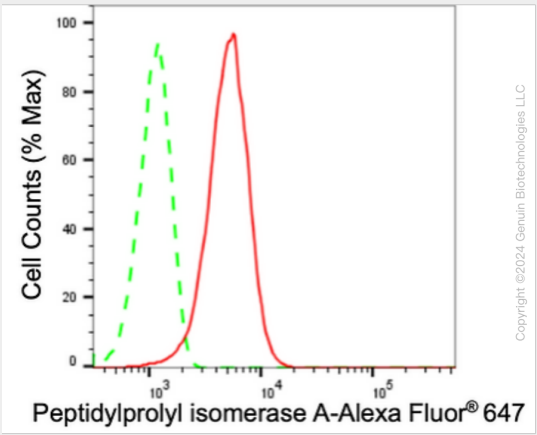
10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999



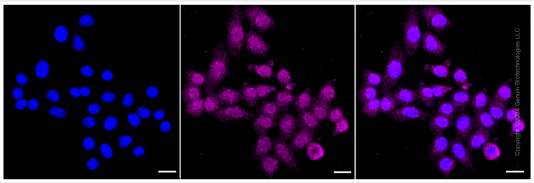
Western blotting analysis using anti-Peptidylprolyl isomerase A antibody (Cat#AGI1635). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-Peptidylprolyl isomerase A antibody (Cat#AGI1635, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.



Western blotting analysis using anti-peptidylprolyl isomerase A antibody (Cat#AGI1635). Peptidylprolyl isomerase A expression in wild-type (WT) and peptidylprolyl isomerase A (PPIA) shRNA knockdown (KD) HeLa cells with 30 µg of total cell lysates. β-Tubulin serves as a loading control. The blot was incubated with anti-peptidylprolyl isomerase A antibody (Cat#AGI1635, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.



Flow cytometric analysis of Peptidylprolyl isomerase A expression in HepG2 cells using anti-Peptidylprolyl isomerase A antibody (Cat#AGI1635, 1:2,000). Green, isotype control; red, Peptidylprolyl isomerase A.



10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Immunocytochemical staining of HepG2 cells with anti-Peptidylprolyl isomerase A antibody (Cat#AGI1635, 1:1,000). Nuclei were stained blue with DAPI; Peptidylprolyl isomerase A was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: Low. Scale bar: 20 µm.