

PPIA / Cyclophilin A Antibody
Rabbit Polyclonal Antibody
Catalog # ALS17151**Specification**

PPIA / Cyclophilin A Antibody - Product Information

Application	IHC-P, WB
Primary Accession	P62937
Other Accession	5478
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	18012

PPIA / Cyclophilin A Antibody - Additional Information**Gene ID** 5478**Other Names**

PPIA, Cyclophilin, Cyclosporin A-binding protein, Cyclophilin A, PPIase A, Rotamase A, CYPH, T cell cyclophilin

Target/Specificity

Human PPIA / Cyclophilin A

Reconstitution & Storage

PBS, pH 7.4, 0.03% Proclin 300, 50% glycerol. Aliquot and store at -20°C or -80°C. Avoid freeze-thaw cycles.

Precautions

PPIA / Cyclophilin A Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

PPIA / Cyclophilin A 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:25678563, PubMed:21593166). 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:30328013, PubMed:22347431).

Cellular Location

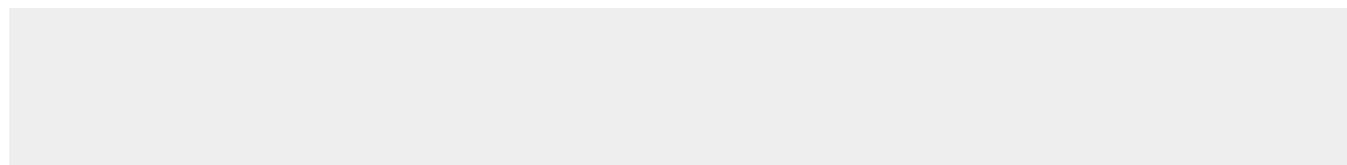
Cytoplasm. Secreted. Nucleus Note=Secretion occurs in response to oxidative stress in vascular smooth muscle through a vesicular secretory pathway that includes Rho GTPase signaling, actin remodeling, and myosin II activation

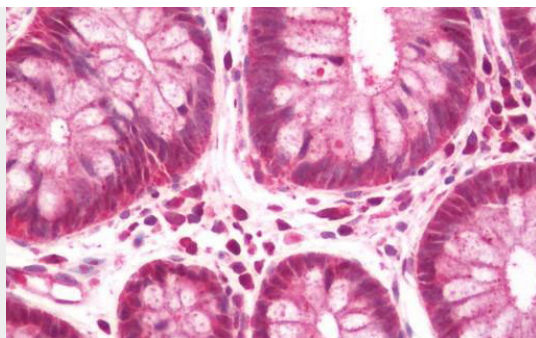
PPIA / Cyclophilin A Antibody - Protocols

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

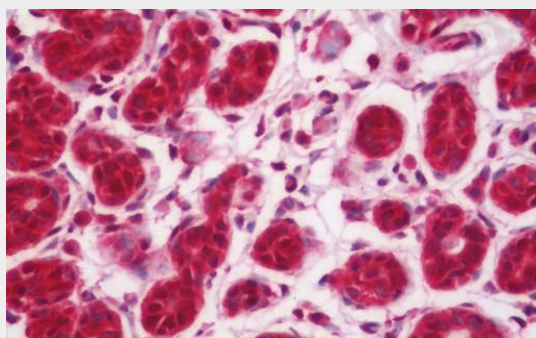
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

PPIA / Cyclophilin A Antibody - Images

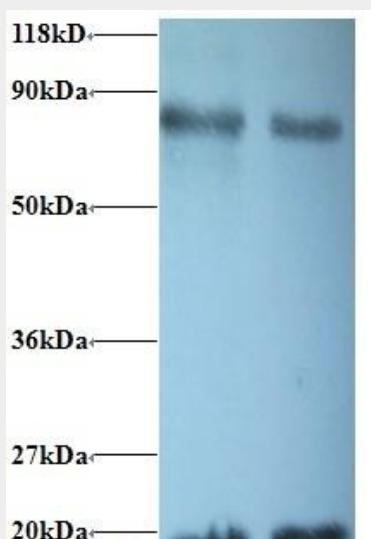




Human Colon: Formalin-Fixed, Paraffin-Embedded (FFPE)



Human Breast: Formalin-Fixed, Paraffin-Embedded (FFPE)



Western blot of Peptidyl-prolyl cis-trans isomerase A antibody at 2 ug/ml.

PPIA / Cyclophilin A Antibody - Background

PPIases accelerate the folding of proteins. It catalyzes the cis-trans isomerization of proline imidic peptide bonds in oligopeptides.

PPIA / Cyclophilin A Antibody - References

- Haendler B.,et al.EMBO J. 6:947-950(1987).
- Haendler B.,et al.Eur. J. Biochem. 190:477-482(1990).
- Ota T.,et al.Nat. Genet. 36:40-45(2004).
- Ebert L.,et al.Submitted (JUN-2004) to the EMBL/GenBank/DDBJ databases.
- Goshima N.,et al.Nat. Methods 5:1011-1017(2008).

