

Anti-Cyclophilin A PPIA Rabbit Monoclonal Antibody

Catalog # ABO14167

Product Information

Application	WB, IHC
Primary Accession	P62937
Host	Rabbit
Isotype	Rabbit IgG
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Format	Liquid
Description	Anti-Cyclophilin A PPIA Rabbit Monoclonal Antibody . Tested in WB, IHC applications. This antibody reacts with Human, Mouse, Rat.

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
Calculated MW	18012
Application Details	WB 1:500-1:2000 IHC 1:50-1:200
Subcellular Localization	Cytoplasm. Secreted. Secretion occurs in response to oxidative stress in vascular smooth muscle through a vesicular secretory pathway that involves actin remodeling and myosin II activation, and mediates ERK1/2 activation.
Source	Eukaryota
Contents	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.
Clone Names	Clone: AABG-16
Immunogen	A synthesized peptide derived from human Cyclophilin A
Purification	Affinity-chromatography
Storage	Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.

Protein Information

Name	PPIA
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Synonyms

CYPA

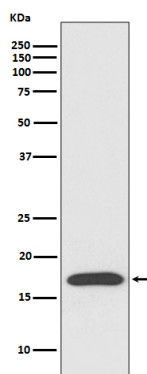
Function

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 BCL2L1 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 Cell membrane. 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.

Images



Western blot analysis of Cyclophilin A expression in HepG2 cell lysate.

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