

CyPA Polyclonal Antibody

Catalog # AP73380

Product Information

Application	WB, IHC-P, IF, ICC, E
Primary Accession	P62937
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	18012

Additional Information

Gene ID	5478
Other Names	PPIA; CYPA; Peptidyl-prolyl cis-trans isomerase A; PPIase A; Cyclophilin A; Cyclosporin A-binding protein; Rotamase A
Dilution	WB~~Western Blot: 1/500 - 1/2000. IHC-p: 1:100-300 ELISA: 1/20000. Not yet tested in other applications. IHC-P~~Western Blot: 1/500 - 1/2000. IHC-p: 1:100-300 ELISA: 1/20000. Not yet tested in other applications. IF~~1:50~200 ICC~~N/A E~~N/A
Format	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.
Storage Conditions	-20°C

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](#)).

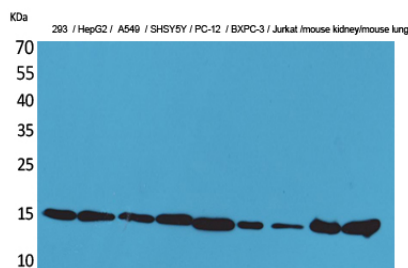
Cellular Location

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

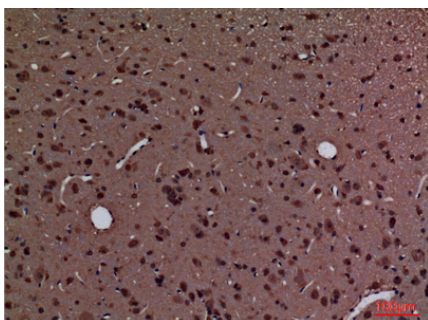
Background

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

Images

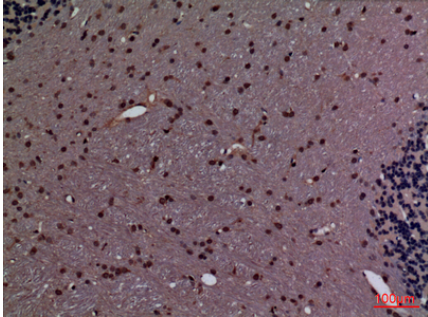
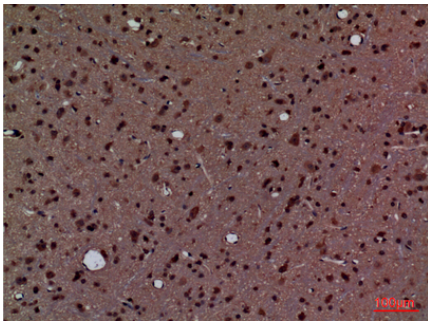


Western Blot analysis of 293, HepG2, A549, SHSY5Y, PC-12, BXP-3, Jurkat, mouse kidney, mouse lung cells using CyPA Polyclonal Antibody.. Secondary antibody was diluted at 1:20000

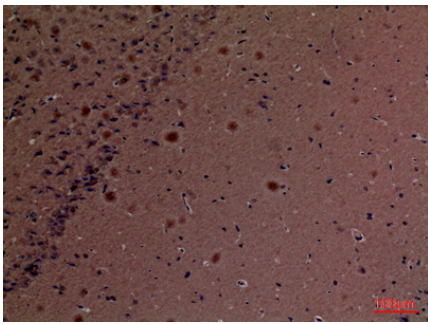


Immunohistochemical analysis of paraffin-embedded rat-brain, antibody was diluted at 1:100

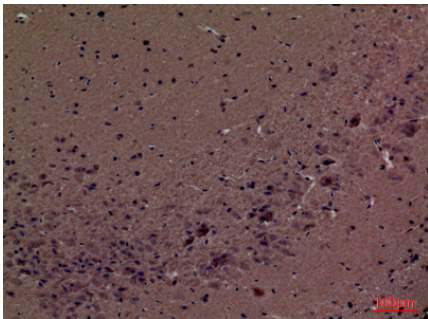
Immunohistochemical analysis of paraffin-embedded rat-brain, antibody was diluted at 1:100



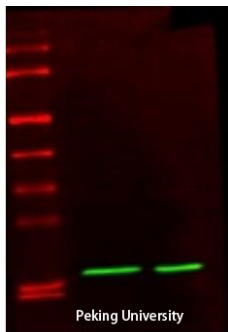
Immunohistochemical analysis of paraffin-embedded rat-brain, antibody was diluted at 1:100



Immunohistochemical analysis of paraffin-embedded mouse-brain, antibody was diluted at 1:100



Immunohistochemical analysis of paraffin-embedded mouse-brain, antibody was diluted at 1:100



The picture was kindly provided by our customer

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