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PDIA6 Antibody (Center K159)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP6662b

Product Information

Application	WB, IHC-P, FC, IF, E
Primary Accession	Q15084
Reactivity	Human, Rat, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	48121
Antigen Region	144-172

Additional Information

Gene ID	10130
Other Names	Protein disulfide-isomerase A6, Endoplasmic reticulum protein 5, ER protein 5, ERp5, Protein disulfide isomerase P5, Thioredoxin domain-containing protein 7, PDIA6, ERP5, P5, TXNDC7
Target/Specificity	This PDIA6 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 144-172 amino acids from the Central region of human PDIA6.
Dilution	WB~~1:1000 IHC-P~~1:100~500 FC~~1:10~50 IF~~1:100 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	PDIA6 Antibody (Center K159) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	PDIA6
Synonyms	ERP5, P5, TXNDC7
Function	May function as a chaperone that inhibits aggregation of misfolded proteins

	(PubMed:12204115). Negatively regulates the unfolded protein response (UPR) through binding to UPR sensors such as ERN1, which in turn inactivates ERN1 signaling (PubMed:24508390). May also regulate the UPR via the EIF2AK3 UPR sensor (PubMed:24508390). Plays a role in platelet aggregation and activation by agonists such as convulxin, collagen and thrombin (PubMed:15466936).
Cellular Location	Endoplasmic reticulum lumen. Cell membrane. Melanosome. Note=Identified by mass spectrometry in melanosome fractions from stage I to stage IV (PubMed:12643545)
Tissue Location	Expressed in platelets (at protein level).

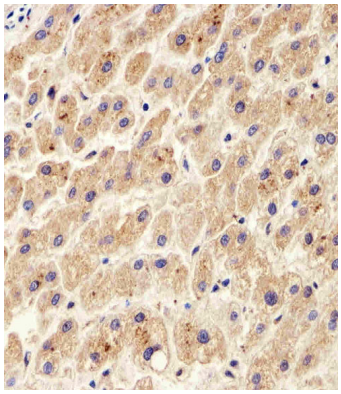
Background

Protein disulfide isomerases (EC 5.3.4.1), such as PDIA6, are endoplasmic reticulum (ER) resident proteins that catalyze formation, reduction, and isomerization of disulfide bonds in proteins and are thought to play a role in folding of disulfide-bonded proteins.

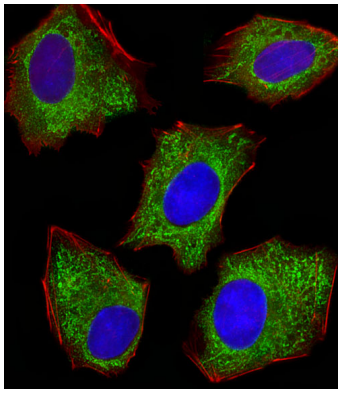
References

Hayano,T.,Gene 164 (2), 377-378 (1995)

Images

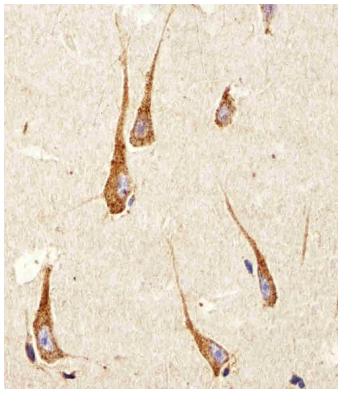


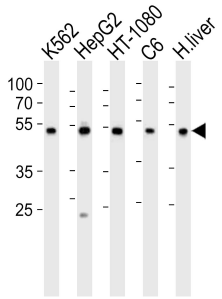
Immunohistochemical analysis of paraffin-embedded H. liver section using PDIA6 Antibody (Center K159)(Cat#AP6662b). AP6662b was diluted at 1:100 dilution. A peroxidase-conjugated goat anti-rabbit IgG at 1:400 dilution was used as the secondary antibody, followed by DAB staining.



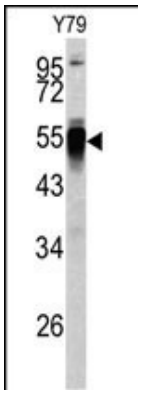
Fluorescent image of HepG2 cells stained with XAF1 PDIA6 Antibody (Center K159)(Cat#AP6662b). AP6662b was diluted at 1:100 dilution. An Alexa Fluor 488-conjugated goat anti-rabbit lgG at 1:400 dilution was used as the secondary antibody (green). DAPI was used to stain the cell nuclear (blue). Cytoplasmic actin was counterstained with Alexa Fluor® 555 conjugated with Phalloidin (red).

Immunohistochemical analysis of paraffin-embedded H. brain section using PDIA6 Antibody (Center K159)(Cat#AP6662b). AP6662b was diluted at 1:100 dilution. A peroxidase-conjugated goat anti-rabbit IgG at 1:400 dilution was used as the secondary antibody, followed by DAB staining.

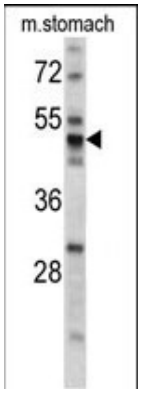




Western blot analysis of lysates from K562, HepG2, HT-1080, rat C6 cell line and human liver tissue lysate (from left to right), using PDIA6 Antibody (Center K159)(Cat. #AP6662b). AP6662b was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L(HRP) at 1:10000 dilution was used as the secondary antibody. Lysates at 35ug per lane.

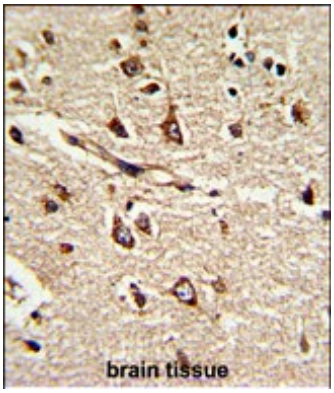


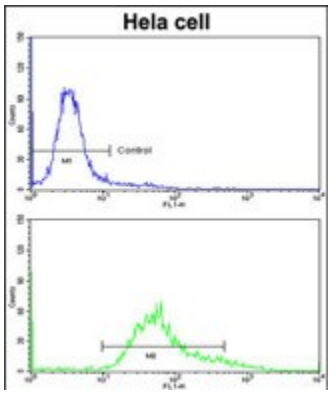
Western blot analysis of PDIA6 antibody (Center K159) (Cat.# AP6662b) in Y79 cell line lysates (35ug/lane). PDIA6 (arrow) was detected using the purified Pab.



Western blot analysis of PDIA6 antibody (Center K159) (Cat.# AP6662b) in mouse stomach tissue lysates (35ug/lane). PDIA6 (arrow) was detected using the purified Pab.

Formalin-fixed and paraffin-embedded human brain tissue reacted with PDIA6 Antibody (Center K159), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.





Flow cytometric analysis of hela cells using PDIA6 Antibody (Center K159)(bottom histogram) compared to a negative control cell (top histogram)FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.