Anti-PDIA1 (PDI) Rabbit pAb

Affinity Purified Rabbit Polyclonal Antibody

Catalog # P900003

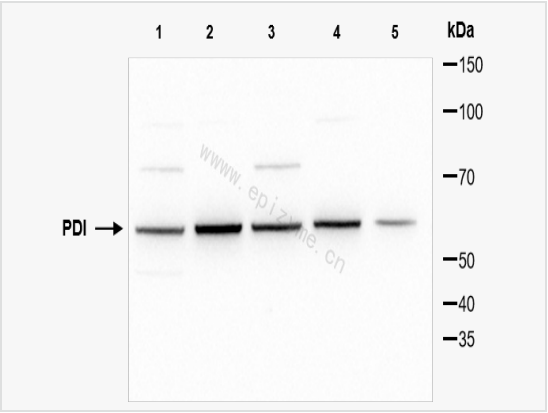
Product Information

Application	WB, IHC-P, IF (Cell)/ICC, IF (Tissue-P), ELISA
Reactivity	Human
Dilution	WB 1:5,000; IHC-P 1:200~1:1,000; IF 1:50~1:100
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Label	Unconjugated
Immunogen	This PDI antibody is generated from rabbits immunized with a BSA conjugated synthetic peptide between 488-502 amino acids from the C-terminal region of human PDI.
Format	Purified polyclonal antibody supplied in PBS with 0.01% (W/V) sodium azide and 50% glycerol, pH 7.3. This antibody is purified through a protein G column.
Storage	Shipped on wet ice. Store at 20°C. Stable for 24 months from date of receipt. Aliquoting is unnecessary for -20°C storage.
Precautions	Anti-PDIA1 (PDI) Rabbit pAb is for research use only and not for use in diagnostic or therapeutic procedures.

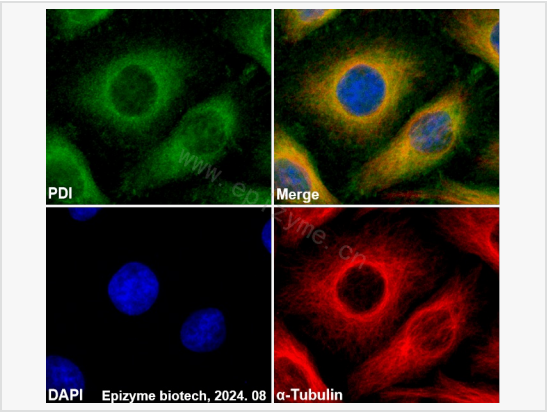
Protein Information

Synonyms	P4HB, ERBA2L, PDI, PDIA1, PO4DB
Calculated MW	Calculated MW: 57 kDa; Observed MW: 57 kDa
Primary Accession	P07237
Other Accession	NP_000909.2
Gene ID	5034
Antigen Region	488-502aa
Background	This multifunctional protein catalyzes the formation, breakage and rearrangement of disulfide bonds. At the cell surface, seems to act as a reductase that cleaves disulfide bonds of proteins attached to the cell. May therefore cause structural modifications of exofacial proteins. Inside the cell, seems to form/rearrange disulfide bonds of nascent proteins. At high concentrations, functions as a chaperone that inhibits aggregation of misfolded proteins. At low concentrations, facilitates aggregation (anti-chaperone activity). May be involved with other chaperones in the structural modification of the TG precursor in hormone biogenesis. Also acts a structural subunit of various enzymes such as prolyl 4-hydroxylase and microsomal triacylglycerol transfer protein MTTP.
Cellular Location	Endoplasmic reticulum. Endoplasmic reticulum lumen. Melanosome. Cell membrane; Peripheral membrane protein. Note=Highly abundant. In some cell types, seems to be also secreted or associated with the plasma membrane, where it undergoes constant shedding and replacement from intracellular sources (Probable). Localizes near CD4-enriched regions on lymphoid cell surfaces

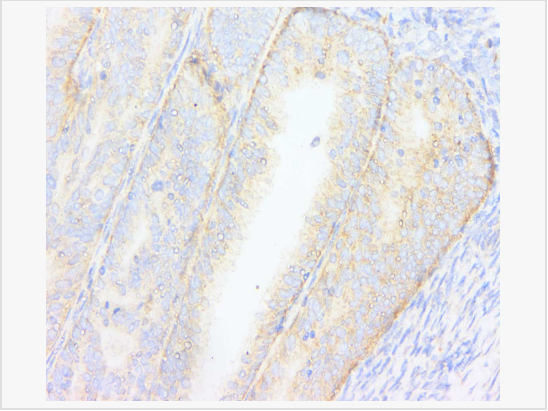
Validation Images



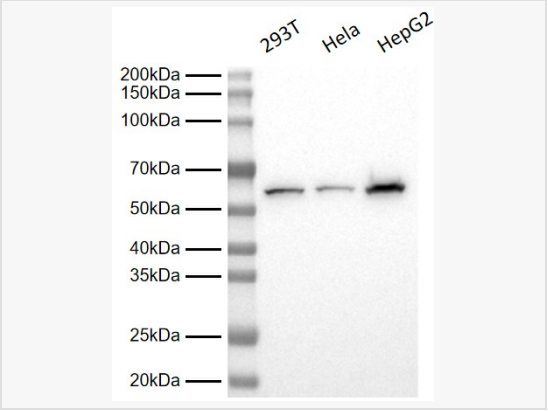
Western Blot - Anti-PDIA1 (PDI) Rabbit pAb
All lanes: P900003 at 1:1,000 dilution
Lane 1: HeLa (Human cervix adenocarcinoma epithelial cell) whole cell lysates
Lane 2: HepG2 (human hepatocellular carcinoma epithelial cell) whole cell lysates
Lane 3: HCT116 (Human colorectal carcinoma epithelial cell) whole cell lysates
Lane 4: A431 (Human epidermoid teratoma cell) whole cell lysates
Lane 5: T24 (Human bladder cancer epithelial cell) whole cell lysates
Lysates/proteins at 10 µg per lane.
Secondary antibody: Goat Anti-Rabbit IgG(H+L), HRP Conjugated (Cat. No. LF102) at 1:5,000 dilution
Predicted band size: 57 kDa
Observed band size: 57 kDa
Developed using the ECL technique (Cat. No. SQ201).



Immunofluorescence - Anti-PDIA1 (PDI) Rabbit pAb
Sample: Hela cells
The cells were fixed with 4% paraformaldehyde (10 min), permeabilized with 0.1% Triton X-100 for 5 minutes and then blocked with 5% BSA in 0.1% PBS-Tween for 0.5 hours.
Primary antibodies: P900003 at 1:50 dilution and α-tubulin Mouse Monoclonal Antibody (Cat. No. LF209) at 1:50 dilution
Secondary antibodies: Goat anti-Rabbit (488) at 1:1,000 dilution (shown in green) and Goat anti-Mouse (555) at 1:1,000 dilution (shown in red)
Nuclei were stained with DAPI (shown in blue).



Immunohistochemical analysis of paraffin-embedded uterine tissue using Anti-PDI Rabbit pAb. Antigen repair using EDTA antigen repair solution and blocking with 5% BSA for half 0.5 hour.Samples were incubated with primary antibody (1/1000) overnight at 4°C. A undiluted HRP-labeled anti-rabbit IgG was used as the secondary antibody for 0.5 hour.



All lanes: Anti-PDIA1 (PDI) Rabbit pAb at 1:5,000 dilution
Lane 1: 293T cell Lysates
Lane 2: Hela cell Lysates
Lane 3: HepG2 cell LysatesLysates/proteins at 20 µg per lane.
Secondary Goat Anti-Rabbit IgG, (H L), Peroxidase conjugated (LF102) at 1:2,000 dilution. Observed band size: 57 kDaBlocking/Dilution buffer: 1×PBST.