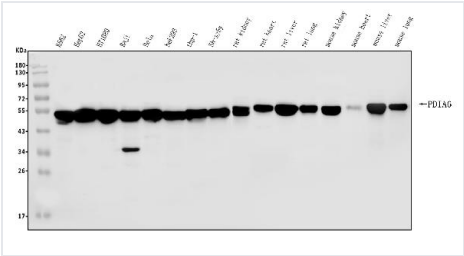
PDIA6 Antibody – Rabbit Polyclonal

PRODUCT OVERVIEW

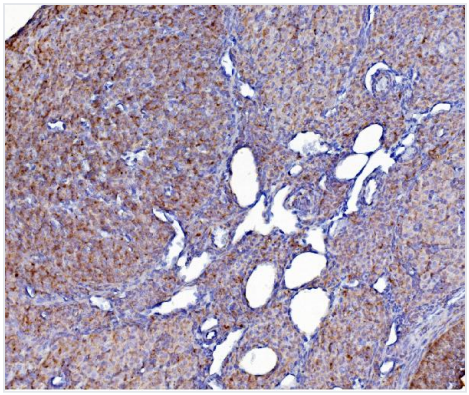
Product Name	PDIA6, Polyclonal Antibody
Full Product Name	Anti-PDIA6 Antibody
Product Gene Name	anti-PDIA6 antibody
Product Synonym Names	PDIA6; ERP5; P5; TXNDC7; Protein disulfide-isomerase A6; EC 5. 3. 4. 1; Endoplasmic reticulum protein 5; ER protein 5; ERp5; Protein disulfide isomerase P5; Thioredoxin domain-containing protein 7; protein disulfide isomerase family A member 6
Clonality	Polyclonal
Isotype	Rabbit IgG
Host	Rabbit
Species Reactivity	Human, Mouse, Rat
Form/Format	Lyophilized. Each vial contains 4mg Trehalose, 0.9mg NaCl and 0.2mg Na2HPO4.
Purity/Purification	Immunogen affinity purified.
Specificity	Rabbit IgG polyclonal antibody for PDIA6 detection.
Preparation and Storage	Store at -20 degree C for one year. After reconstitution, at 4 degree C for one month. It can also be aliquotted and stored frozen at -20 degree C for a longer time. Avoid repeated freezing and thawing.
Molecular Weight	440
OMIM	611099
3D Structure	ModBase 3D Structure for Q15084
Immunogen	E Coli-derived human PDIA6 recombinant protein (Position: L20-L440).
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.
Recommended Detection Systems	Recommended Detection Systems||Lab recommends Enhanced Chemiluminescent Kit with anti-Rabbit IgG (MBS176460) for Western blot, and HRP Conjugated anti-Rabbit IgG Super Vision Assay Kit (MBS176453) for IHC(P) and ICC.
ISO Certification	Manufactured in an ISO 13485:2003 and EN ISO 13485:2012 Certified Laboratory.
Applications Tested/Suitable for anti-PDIA6 antibody	Western Blot (WB), Immunohistochemistry-Paraffin (IHC-P), Immunocytochemistry (ICC), Immunofluorescence (IF), Flow Cytometry (FC/FACS/FCM), Direct ELISA (EIA)
Application Notes for anti-PDIA6 antibody	WB: 0.1-0.25ug/ml|Human, Mouse, Rat| IHC-P: 2-5ug/ml|Human, Mouse, Rat| ICC/IF: 5ug/ml|Human| FC/FACS/FCM: 1-3ug/1x106 cells|Human| Direct ELISA: 0.1-0.5ug/ml|Human|
Related Product Information for anti-PDIA6 antibody	This gene encodes a member of the disulfide isomerase (PDI) family of endoplasmic reticulum (ER) proteins that catalyze protein folding and thiol-disulfide interchange reactions. The encoded protein has an N-terminal ER-signal sequence, two catalytically active thioredoxin (TRX) domains, a TRX-like domain, and a C-terminal ER-retention sequence. This protein inhibits the aggregation of misfolded proteins and exhibits both isomerase and chaperone activity. Alternative splicing results in multiple transcript variants encoding different isoforms.

Product References and Citations for anti-PDIA6 antibody	1. Chaudhuri, M. M., Tonin, P. N., Lewis, W. H., Srinivasan, P. R. The gene for a novel protein, a member of the protein disulphide isomerase/Form I phosphoinositide-specific phospholipase C family, is amplified in hydroxyurea-resistant cells. Biochem. J. 281: 645-650, 1992. 2. Hayano, T., Kikuchi, M. Cloning and sequencing of the cDNA encoding human P5. Gene 164: 377-378, 1995. 3. Hoshijima, K., Metherall, J. E., Grunwald, D. J. A protein disulfide isomerase expressed in the embryonic midline is required for left/right asymmetries. Genes Dev. 16: 2518-2529, 2002.
Other Notes	Small volumes of anti-PDIA6 antibody vial(s) may occasionally become entrapped in the seal of the product vial during shipment and storage. If necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container`s cap. Certain products may require to ship with dry ice and additional dry ice fee may apply.
Searchable Terms for PDIA6 purchase	MBS1753620 is an antibody targeting PDIA6. Reactive in Human, Mouse, Rat. Host: Rabbit.



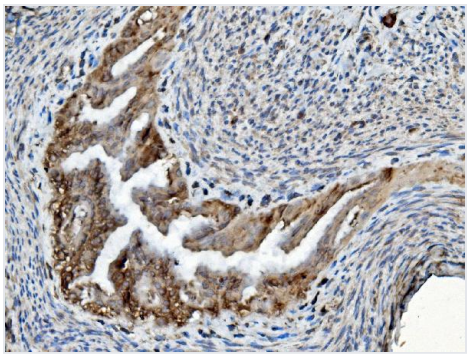
Western Blot (WB) of anti-PDIA6 antibody

Figure 1. Western blot analysis of PDIA6 using anti-PDIA6 antibody (MBS1753620).Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30ug of sample under reducing conditions.Lane 1: human K562 whole cell lysatesLane 2: human HepG2 whole cell lysatesLane 3: human HT1080 whole cell lysatesLane 4: human Raji whole cell lysatesLane 5: human Hela whole cell lysatesLane 6: human HEK293 whole cell lysatesLane 7: human THP-1 whole cell lysatesLane 8: human SH-SY5Y whole cell lysatesLane 9: rat kidney tissue lysatesLane 10: rat heart tissue lysatesLane 11: rat liver tissue lysatesLane 12: rat lung tissue lysatesLane 13: mouse kidney tissue lysatesLane 14: mouse heart tissue lysatesLane 15: mouse liver tissue lysatesLane 16: mouse lung tissue lysates.After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1. 5 hour at RT. The membrane was incubated with rabbit anti-PDIA6 antigen affinity purified polyclonal antibody (Catalog # MBS1753620) at 0. 25 ?g/mL overnight at 4 degree C, then washed with TBS-0. 1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:5000 for 1. 5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # MBS176460) with Tanon 5200 system. A specific band was detected for PDIA6 at approximately 50KD. The expected band size for PDIA6 is at 50KD.



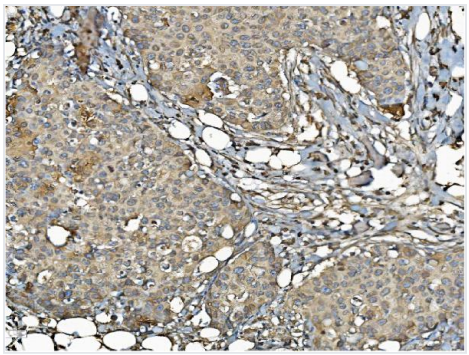
Immunohistochemistry (IHC) of anti-PDIA6 antibody

Figure 2. IHC analysis of PDIA6 using anti-PDIA6 antibody (MBS1753620).PDIA6 was detected in paraffin-embedded section of mouse ovary tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8. 0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2? g/ml rabbit anti-PDIA6 Antibody (MBS1753620) overnight at 4 degree C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Strepavidin-Biotin-Complex (SABC) (Catalog # MBS176451) with DAB as the chromogen.



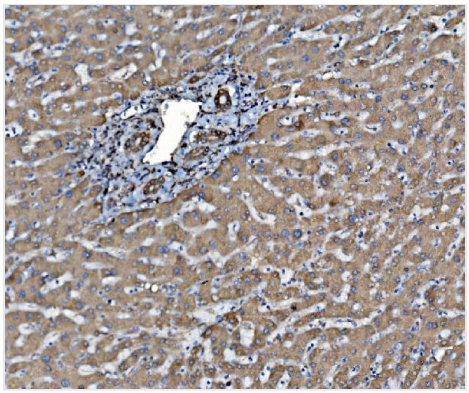
Immunohistochemistry (IHC) of anti-PDIA6 antibody

Figure 3. IHC analysis of PDIA6 using anti-PDIA6 antibody (MBS1753620).PDIA6 was detected in paraffin-embedded section of rat ovary tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8. 0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2?g/ml rabbit anti-PDIA6 Antibody (MBS1753620) overnight at 4 degree C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Strepavidin-Biotin-Complex (SABC) (Catalog # MBS176451) with DAB as the chromogen.



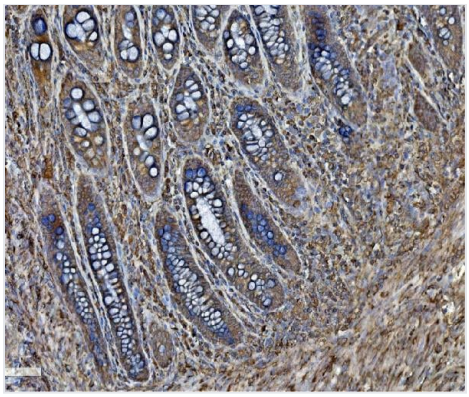
Immunohistochemistry (IHC) of anti-PDIA6 antibody

Figure 4. IHC analysis of PDIA6 using anti-PDIA6 antibody (MBS1753620).PDIA6 was detected in paraffin-embedded section of human breast cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8. 0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2?g/ml rabbit anti-PDIA6 Antibody (MBS1753620) overnight at 4 degree C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Strepavidin-Biotin-Complex (SABC) (Catalog # MBS176451) with DAB as the chromogen.



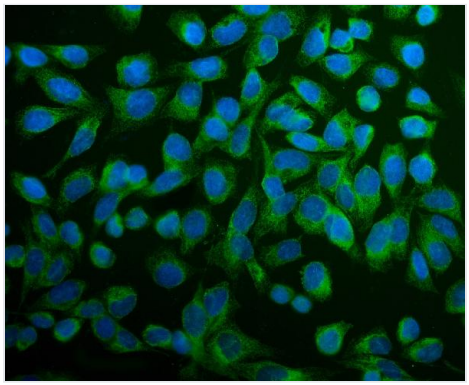
Immunohistochemistry (IHC) of anti-PDIA6 antibody

Figure 5. IHC analysis of PDIA6 using anti-PDIA6 antibody (MBS1753620).PDIA6 was detected in paraffin-embedded section of human liver cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8. 0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2? g/ml rabbit anti-PDIA6 Antibody (MBS1753620) overnight at 4 degree C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Strepavidin-Biotin-Complex (SABC) (Catalog # MBS176451) with DAB as the chromogen.



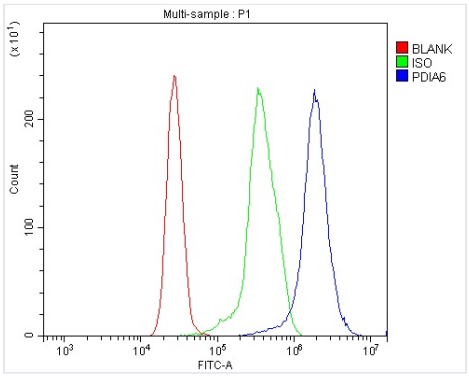
Immunohistochemistry (IHC) of anti-PDIA6 antibody

Figure 6. IHC analysis of PDIA6 using anti-PDIA6 antibody (MBS1753620).PDIA6 was detected in paraffin-embedded section of human rectal cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8. 0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2? g/ml rabbit anti-PDIA6 Antibody (MBS1753620) overnight at 4 degree C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Strepavidin-Biotin-Complex (SABC) (Catalog # MBS176451) with DAB as the chromogen.



Immunofluorescence (IF) of anti-PDIA6 antibody

Figure 7. IF analysis of PDIA6 using anti- PDIA6 antibody (MBS1753620).PDIA6 was detected in immunocytochemical section of U20S cells. Enzyme antigen retrieval was performed using IHC enzyme antigen retrieval reagent (MBS176582) for 15 mins. The cells were blocked with 10% goat serum. And then incubated with 5?g/mL rabbit anti- PDIA6 Antibody (MBS1753620) overnight at 4 degree C. DyLight®488 Conjugated Goat Anti-Rabbit IgG was used as secondary antibody at 1:100 dilution and incubated for 30 minutes at 37 degree C. The section was counterstained with DAPI. Visualize using a fluorescence microscope and filter sets appropriate for the label used.



Flow Cytometry (FC/FACS) of anti-PDIA6 antibody

Figure 8. Flow Cytometry analysis of K562 cells using anti-PDIA6 antibody (MBS1753620).Overlay histogram showing K562 cells stained with MBS1753620 (Blue line). The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-PDIA6 Antibody (MBS1753620, 1?g/1x106 cells) for 30 min at 20 degree C. DyLight®488 conjugated goat anti-rabbit IgG (5-10?g/1x106 cells) was used as secondary antibody for 30 minutes at 20 degree C. Isotype control antibody (Green line) was rabbit IgG (1?g/1x106) used under the same conditions. Unlabelled sample (Red line) was also used as a control.

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for PDIA6. It may not necessarily be applicable to this product.

NCBI GI #	2501205
NCBI GeneID	10130
NCBI Accession #	Q15084.1
UniProt Primary Accession #	Q15084
UniProt Secondary Accession #	Q53RC7; Q6ZSH5; Q99778; B3KY95; B5MCQ5; B7Z254; B7Z4M8; F8WA83
UniProt Related Accession #	Q15084
NCBI Official Full Name	Protein disulfide-isomerase A6
NCBI Official Synonym Full Names	protein disulfide isomerase family A, member 6
NCBI Official Symbol	PDIA6

NCBI Official Synonym Symbols	P5; ERP5; TXNDC7
UniProt Protein Name	Protein disulfide-isomerase A6
UniProt Synonym Protein Names	Endoplasmic reticulum protein 5; ER protein 5; ERp5; Protein disulfide isomerase P5; Thioredoxin domain-containing protein 7
Protein Family	Protein disulfide-isomerase
UniProt Gene Name	PDIA6
UniProt Synonym Gene Names	ERP5; P5; TXNDC7; ER protein 5; ERp5
UniProt Entry Name	PDIA6_HUMAN
NCBI Protein Information	protein disulfide-isomerase A6; ER protein 5; protein disulfide isomerase P5; endoplasmic reticulum protein 5; thioredoxin domain-containing protein 7; protein disulfide isomerase-associated 6; protein disulfide isomerase-related protein; thioredoxin doma
NCBI Summary for PDIA6	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 (Hayano and Kikuchi, 1995 [PubMed 7590364]).[supplied by OMIM, Mar 2008]
UniProt Comments for PDIA6	PDIA6: May function as a chaperone that inhibits aggregation of misfolded proteins. Plays a role in platelet aggregation and activation by agonists such as convulxin, collagen and thrombin. Belongs to the protein disulfide isomerase family. 2 isoforms of the human protein are produced by alternative splicing. Protein type: EC 5.3.4.1; Isomerase Chromosomal Location of Human Ortholog: 2p25.1 Cellular Component: endoplasmic reticulum membrane; endoplasmic reticulum lumen; endoplasmic reticulum; melanosome; plasma membrane; ER-Golgi intermediate compartment Molecular Function: protein binding; protein disulfide isomerase activity Biological Process: unfolded protein response, activation of signaling protein activity; cellular protein metabolic process; protein folding; unfolded protein response; cell redox homeostasis; apoptotic cell clearance
Research Articles on PDIA6	**1.** levels of expression of ERp5 and GRP78 correlated with the level of expression of membrane-bound MICA in chronic lymphocytic leukemia patients.
Precautions	All of MyBioSource's Products are for scientific laboratory research purposes and are not for diagnostic, therapeutics, prophylactic or in vivo use. Through your purchase, you expressly represent and warrant to MyBioSource that you will properly test and use any Products purchased from MyBioSource in accordance with industry standards. MyBioSource and its authorized distributors reserve the right to refuse to process any order where we reasonably believe that the intended use will fall outside of our acceptable guidelines.
Disclaimer	While every efforts were made to ensure the accuracy of the information provided in this datasheet, MyBioSource will not be liable for any omissions or errors contained herein. MyBioSource reserves the right to make changes to this datasheet at any time without prior notice. It is the responsibility of the customer to report product performance issues to MyBioSource within 30 days of receipt of the product. Please visit our Terms & Conditions page for more information.
Product Note	Select online data sheet information is drawn from bioinformatics databases, occasionally resulting in ambiguous or non-relevant product information. It is the responsibility of the customer to review, verify, and evaluate the information to make sure it matches their requirements before purchasing the kit. Our ELISA Kit assays are dynamic research tools and sometimes they may be updated and improved. If the format of this assay is important to you then please request the current manual or contact our technical support team with a presales inquiry before placing an order. We will confirm the current details of the assay. We cannot guarantee the sample manual posted online is the most current manual, it is intended to serve as an example only. Please refer to the instructions For Use provided with the assay kit for precise details.

For Research Use Only. Not for use in diagnostic or therapeutic procedures.