

ERp57 Polyclonal Antibody | anti-ERp57 antibody

Anti-ERp57 Antibody

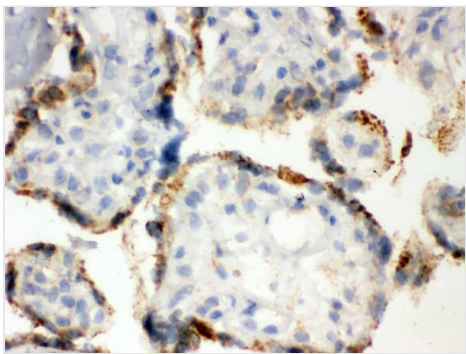
CATALOG # AAA46337	REACTIVITY Human, Mouse, Rat	APPLICATIONS Immunohistochemistry, Western Blot
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PRODUCT SYNONYMS

ERp57; Polyclonal Antibody; Anti-ERp57 Antibody; Protein disulfide-isomerase A3; 58 kDa glucose regulated protein; 58 kDa glucose-regulated protein; 58 kDa microsomal protein; Disulfide isomerase ER 60; Disulfide isomerase ER-60; Endoplasmic reticulum resident protein 57; Endoplasmic reticulum resident protein 60; ER p57; ER protein 57; ER protein 60; ERp 57; ERp60; ERp61; Glucose Regulated Protein 58 Kd; GRP 57; GRP 58; GRP57; GRP58; HsT17083; P58; PDIA 3; PDIA3; PDIA3_HUMAN; Phospholipase C alpha; PI PLC; Protein disulfide isomerase A3; Protein disulfide isomerase family A member 3; Protein disulfide-isomerase A3 antibody; protein disulfide isomerase family A; member 3; anti-ERp57 antibody

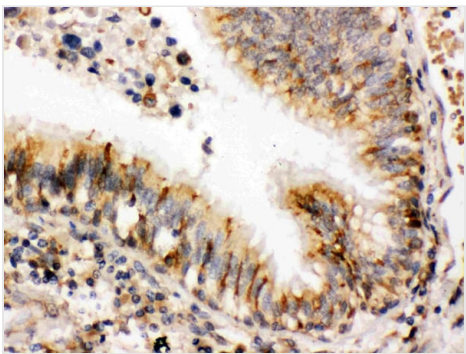
PRODUCT SPECIFICATIONS

Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Purity/Purification	Immunogen Affinity Purified
Form/Format	Lyophilized. Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.
Sequence Length	505
Applicable Applications for anti-ERp57 antibody	IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	A synthetic peptide corresponding to a sequence at the C-terminus of human ERp57 (471-505aa RELSDFISYLQREATNPPVIQEEKPKKKKKAQEDL), different from the related mouse and rat sequences by two amino acids.
Ig Type	Rabbit IgG
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.
Preparation and Storage	At -20 degree C for one year. After reconstitution, at 4 degree C for one month. It can also be aliquoted and stored frozen at -20 degree C for a longer time. Avoid repeated freezing and thawing.



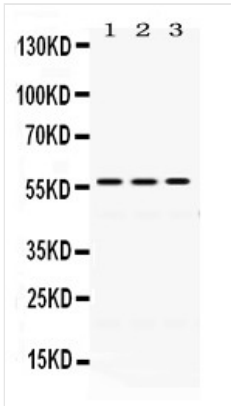
IHC (Immunohistochemistry)

Figure 3. IHC analysis of ERp57 using anti-ERp57 antibody (AAA46337).ERp57 was detected in frozen section of human placenta tissue. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-ERp57 Antibody (AAA46337) 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 Streptavidin-Biotin-Complex (SABC) with DAB as the chromogen.



IHC (Immunohistochemistry)

Figure 2. IHC analysis of PB9771 using anti-PB9771 antibody (AAA46337).PB9771 was detected in paraffin-embedded section of Human Lung Cancer Tissue. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-PB9771 Antibody (AAA46337) 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 Streptavidin-Biotin-Complex (SABC) with DAB as the chromogen.



WB (Western Blot)

Figure 1. Western blot analysis of ERp57 using anti-ERp57 antibody (AAA46337).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 50ug of sample under reducing conditions.Lane 1: Rat Liver Tissue Lysate,Lane 2: Mouse Liver Tissue Lysate,Lane 3: A549 Whole Cell Lysate.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-ERp57 antigen affinity purified polyclonal antibody at 0.5ug/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 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for ERp57 at approximately 57KD. The expected band size for ERp57 is at 57KD.

ADDITIONAL INFORMATION

Related Product Information for anti-ERp57 antibody

Description: Rabbit IgG polyclonal antibody for Protein disulfide-isomerase A3(PDIA3) detection. Tested with WB, IHC-P in Human;Mouse;Rat.

Background: PDIA3 (Protein disulfide isomerase family A, member 3), also called GRP58, Erp57 or ER60, is an isomerase enzyme. It is mapped on 15q15.3. PDIA3 is also part of the major histocompatibility complex (MHC) class I peptide-loading complex, which is essential for formation of the final antigen conformation and export from the endoplasmic reticulum to the cell surface. This gene encodes a protein of the endoplasmic reticulum that interacts with lectin chaperones calreticulin and calnexin to modulate folding of newly synthesized glycoproteins. The protein was once thought to be a phospholipase; however, it has been demonstrated that the protein actually has protein disulfide isomerase activity. It is thought that complexes of lectins and this protein mediate protein folding by promoting formation of disulfide bonds in their glycoprotein substrates.

References	1. "Entrez Gene: PDIA3 protein disulfide isomerase family A, member 3". 2. Ellerman, D. A., Myles, D. G., Primakoff, P. A role for sperm surface protein disulfide isomerase activity in gamete fusion: evidence for the participation of ERp57. Dev. Cell 10: 831-837, 2006 3. Garbi, N., Tanaka, S., Momburg, F., Hammerling, G. J. Impaired assembly of the major histocompatibility complex class I peptide-loading complex in mice deficient in the oxidoreductase ERp57. Nature Immun. 7: 93-102, 2006.
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NCBI AND UNIPROT INFORMATION

NCBI GI #	21361657
NCBI GeneID	2923
NCBI Accession #	NP_005304.3
NCBI GenBank Nucleotide #	NM_005313.4
UniProt Accession #	P30101; Q13453; Q14255; Q8IYF8; Q9UMU7; AAB37397
Molecular Weight	56,782 Da
NCBI Official Full Name	protein disulfide-isomerase A3
NCBI Official Synonym Full Names	protein disulfide isomerase family A member 3
NCBI Official Symbol	PDIA3
NCBI Official Synonym Symbols	P58; ER60; ERp57; ERp60; ERp61; GRP57; GRP58; PI-PLC; HsT17083; HEL-S-269; HEL-S-93n
NCBI Protein Information	protein disulfide-isomerase A3
UniProt Protein Name	Protein disulfide-isomerase A3
UniProt Gene Name	PDIA3
UniProt Synonym Gene Names	ERP57; ERP60; GRP58; p58; ER protein 57; ERp57; ER protein 60; ERp60
UniProt Entry Name	PDIA3_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.