

Mouse anti-Human ERp57 Monoclonal Antibody | anti-PDIA3 antibody

Anti-ERp57 Antibody Picoband (monoclonal, 7E5)

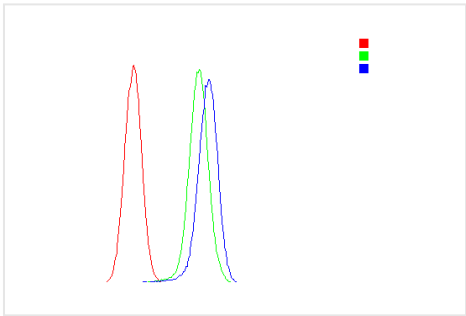
CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA126893	Mouse	Human	Flow Cytometry, Functional Assay, Immunohistochemistry, Western Blot

PRODUCT SYNONYMS

ERp57; Monoclonal Antibody; Anti-ERp57 Antibody Picoband (monoclonal; 7E5); anti-PDIA3 antibody

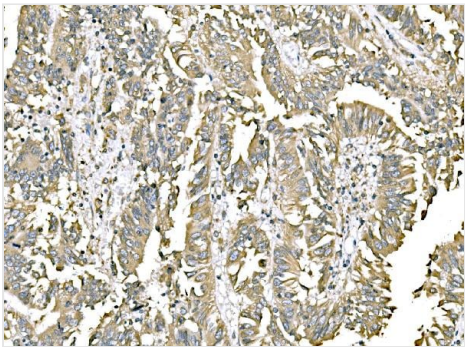
PRODUCT SPECIFICATIONS

Host	Mouse
Reactivity	Human
Clonality	Monoclonal
Isotype	Mouse IgG1
Clone Number	7E5
Purity/Purification	Immunogen affinity purified.
Form/Format	Lyophilized Each vial contains 4 mg Trehalose, 0.9 mg NaCl and 0.2 mg Na ₂ HPO ₄ .
Concentration	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml. (varies by lot)
Applicable Applications for anti-PDIA3 antibody	FCM/FACS (Flow Cytometry), IHC (Immunohistochemistry), WB (Western Blot)
Reconstitution	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml.
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.
Preparation and Storage	Store at -20 degree C for one year from date of receipt. After reconstitution, at 4 degree C for one month. It can also be aliquotted and stored frozen at -20 degree C for six months. Avoid repeated freezing and thawing.



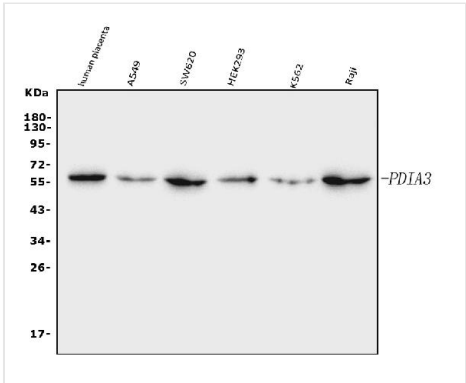
FCM/FACS (Flow Cytometry)

Figure 3. Flow Cytometry analysis of U87 cells using anti-ERp57 antibody (AAA126893).Overlay histogram showing U87 cells stained with AAA126893 (Blue line). The cells were blocked with 10% normal goat serum. And then incubated with mouse anti-ERp57 Antibody (AAA126893, 1 ug/1x10⁶ cells) for 30 min at 20 degree C. DyLight488 conjugated goat anti-mouse IgG was used as secondary antibody for 30 minutes at 20 degree C. Isotype control antibody (Green line) was mouse IgG (1 ug/1x10⁶) used under the same conditions. Unlabelled sample (Red line) was also used as a control.



IHC (Immunohistochemistry)

Figure 2. IHC analysis of ERp57 using anti-ERp57 antibody (AAA126893).ERp57 was detected in a paraffin-embedded section of human rectal cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 ug/ml mouse anti-ERp57 Antibody (AAA126893) overnight at 4 degree C. Peroxidase Conjugated Goat Anti-mouse IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using HRP Conjugated Mouse IgG Super Vision Assay Kit with DAB as the chromogen.



WB (Western Blot)

Figure 1. Western blot analysis of ERp57 using anti-ERp57 antibody (AAA126893).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 30 ug of sample under reducing conditions.Lane 1: human placenta tissue lysates,Lane 2: human A549 whole cell lysates,Lane 3: human SW620 whole cell lysates,Lane 4: human HEK293 whole cell lysates,Lane 5: human K562 whole cell lysates,Lane 6: human Raji whole cell lysates.After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with mouse anti-ERp57 antigen affinity purified monoclonal antibody (#AAA126893) at 0.5 ug/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-mouse 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 with Tanon 5200 system. A specific band was detected for ERp57 at approximately 57 kDa. The expected band size for ERp57 is at 57 kDa.

ADDITIONAL INFORMATION

Related Product Information for anti-PDIA3 antibody	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.
Product Categories/Family for anti-PDIA3 antibody	Primary Antibodies, Mouse Monoclonal Antibodies

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
NCBI Protein Information	protein disulfide-isomerase A3; ER protein 57; ER protein 60; phospholipase C-alpha; 58 kDa microsomal protein; disulfide isomerase ER-60; endoplasmic reticulum P58; 58 kDa glucose-regulated protein; glucose regulated protein, 58kDa; protein disulfide iso
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.

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Online datasheet: <https://stage.aaabiotech.com/monoclonal/erp57-antibody-clone-7e5-flow-cytometry-immunohistochemistry-western-blot-elisa/126893>