

Basic Information

Product Name	Anti-ERp57/ERp60/PDIA3 Antibody (Clone#7E5)	
Gene Name	PDIA3	
Source	Mouse	
Clonality	Monoclonal	
Isotype	IgG1	
Species Reactivity	human	
Tested Application	WB, IHC, FCM	
Contents	500 ug/ml antibody with PBS, 0.02% NaN ₃ , 1 mg/ml BSA and 50% glycerol.	
Immunogen	A synthetic peptide corresponding to a sequence at the C-terminus of human ERp57, different from the related mouse and rat sequences by two amino acids.	
Concentration	500 ug/ml	
Purification	protein G purified.	
Observed MW	57 kDa	
Dilution Ratios	Western blot (WB): 1:500-2000 Immunohistochemistry (IHC): 1:50-400 Flow Cytometry (Fixed): 1:50-200 (Boiling the paraffin sections in 10mM citrate buffer,pH6.0,or PH8.0 EDTA repair liquid for 20 mins is required for the staining of formalin/paraffin sections.) Optimal working dilutions must be determined by end user.	

Storage

12 months from date of receipt, -20°C as supplied.

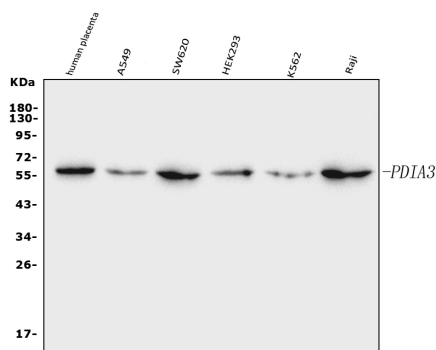
Background Information

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.

Reference

Anti-ERp57/ERp60/PDIA3 Antibody (Clone#7E5)被引用在1文献中。

Selected Validation Data



Western blot analysis of ERp57/ERp60/PDIA3 using anti-ERp57/ERp60/PDIA3 antibody (M01464-4). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: human placenta tissue lysates,

Lane 2: A549 whole cell lysates,

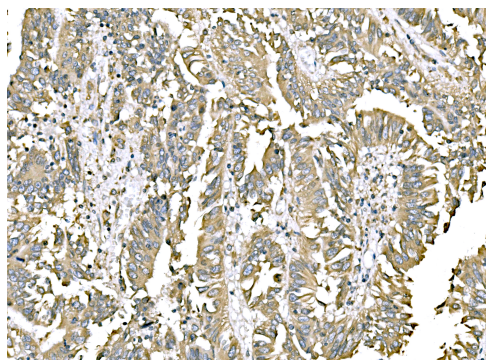
Lane 3: SW620 whole cell lysates,

Lane 4: HEK293 whole cell lysates,

Lane 5: K562 whole cell lysates,

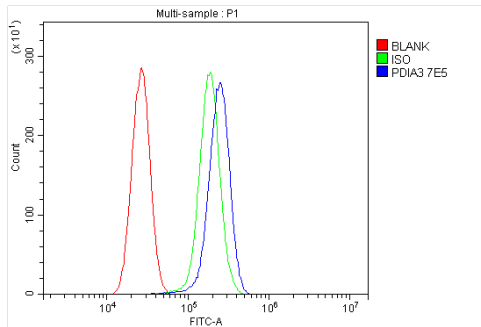
Lane 6: Raji whole cell lysates.

After electrophoresis, proteins were transferred to a membrane. Then the membrane was incubated with mouse anti-ERp57/ERp60/PDIA3 antigen affinity purified monoclonal antibody (M01464-4) at a dilution of 1:1000 and probed with a goat anti-mouse IgG-HRP secondary antibody (Catalog # BA1050). The signal is developed using ECL Plus Western Blotting Substrate (Catalog # AR1197). A specific band was detected for ERp57/ERp60/PDIA3 at approximately 57 kDa. The expected band size for ERp57/ERp60/PDIA3 is at 57 kDa.



IHC analysis of ERp57/ERp60/PDIA3 using anti-ERp57/ERp60/PDIA3 antibody (M01464-4).

ERp57/ERp60/PDIA3 was detected in a paraffin-embedded section of human rectal cancer tissue. The tissue section was incubated with mouse anti-ERp57/ERp60/PDIA3 Antibody (M01464-4) at a dilution of 1:200 and developed using HRP Conjugated mouse IgG Super Vision Assay Kit (Catalog # SV0001) with DAB (Catalog # AR1027) as the chromogen.



Flow Cytometry analysis of U87 cells using anti-ERp57/ERp60/PDIA3 antibody (M01464-4).

Overlay histogram showing U87 cells stained with M01464-4 (Blue line). To facilitate intracellular staining, cells were fixed with 4% paraformaldehyde and permeabilized with permeabilization buffer. The cells were blocked with 10% normal goat serum. And then incubated with mouse anti-ERp57/ERp60/PDIA3 Antibody (M01464-4) at 1:100 dilution for 30 min at 20°C. DyLight®488 conjugated goat anti-mouse IgG (BA1126) was used as secondary antibody at 1:100 dilution for 30 minutes at 20°C. Isotype control antibody (Green line) was mouse IgG at 1:100 dilution used under the same conditions. Unlabelled sample without incubation with primary antibody and secondary antibody (Red line) was used as a blank control.