

Product datasheet for **TA326353**

ERp57 (PDIA3) Mouse Monoclonal Antibody [Clone ID: Map.ERP57]

Product data:

Product Type:	Primary Antibodies
Clone Name:	Map.ERP57
Applications:	WB
Recommended Dilution:	WB: 1:2000
Reactivity:	Human, Mouse, Bovine, Canine, Monkey, Pig, Rabbit, Rat, Hamster, Guinea Pig
Host:	Mouse
Isotype:	IgG1
Clonality:	Monoclonal
Immunogen:	Human Recombinant Erp57 (Grp58)
Formulation:	PBS pH7.4, 50% glycerol, 0.09% sodium azide
Concentration:	lot specific
Purification:	Protein G Purified
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Gene Name:	protein disulfide isomerase family A member 3
Database Link:	NP_005304 Entrez Gene 14827 Mouse Entrez Gene 29468 Rat Entrez Gene 711029 Monkey Entrez Gene 2923 Human P30101



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Background:

ERp57, also known as Glucose Regulated Protein 58 (Grp58), Hormone-Induced Protein-70 (HIP-70) and microsomal Carnitine Palmitoyltransferase, is a member of the protein disulfide isomerase family, containing two canonical CXHC tetrapeptide active site motifs . It has quite a few diverse roles. It functions as an accessory oxidoreductase involved in disulfide bond formation. In the ER, ERp57 interacts with membrane bound calnexin and soluble calreticulin (lectin chaperones) via their praline rich P-domain arms. Lectin chaperones bind nascent non-native glycoproteins, and position ERp57 to act upon the immature or misfolded glycoproteins that possess mono-glucosylated side chains. ERp57 deletion impairs posttranslational phases of influenza hema-glutinin folding, and causes accelerated release of MHC-I molecules, resulting in the coupling of sub-optimal peptides and reduced expression and stability on the cell surface . ERp57 also contains two thioredoxin active-site sequences, CGHC and an estrogen-binding domain. ERp57 is induced by both estrogen and leuteinizing-hormone-releasing hormone in the hippocampus .

Synonyms:

ER60; ERp57; ERp60; ERp61; GRP57; GRP58; HEL-S-93n; HEL-S-269; HsT17083; P58; PI-PLC

Note:

Detects ~57kDa.

Protein Families:

Druggable Genome

Protein Pathways:

Antigen processing and presentation

Product images: