

# **Product datasheet for TA326353**

### OriGene Technologies, Inc.

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## **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 MouseEntrez Gene 29468 RatEntrez Gene 711029 MonkeyEntrez Gene

<u>2923 Human</u> P30101





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 nonnative 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 .

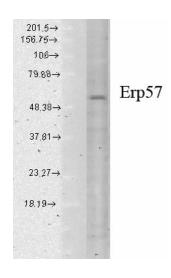
**Synonyms:** ER60; ERp57; ERp60; ERp61; GRP57; GRP58; HEL-S-93n; HEL-S-269; HsT17083; P58; PI-PLC

Note: Detects ~57kDa.

Protein Families: Druggable Genome

**Protein Pathways:** Antigen processing and presentation

### **Product images:**



Western blot analysis of ERP57 in human cell lysates using a 1:1000 dilution of the antibody