antibodies - online.com











Overview

| Quantity: | 200 μg |
|--------------|---|
| Target: | PDIA3 |
| Reactivity: | Human |
| Host: | Mouse |
| Clonality: | Monoclonal |
| Conjugate: | This PDIA3 antibody is conjugated to PE |
| Application: | Western Blotting (WB), Immunohistochemistry (IHC), Immunofluorescence (IF), Immunoprecipitation (IP), Immunocytochemistry (ICC) |

Product Details

| Immunogen: | Human recombinant ERp57 (Grp58) |
|-------------------|---|
| Clone: | Map-ERp57 |
| Isotype: | lgG1 |
| Specificity: | Detects ~57 kDa. |
| Cross-Reactivity: | Cow, Dog, Guinea Pig, Hamster, Human, Monkey, Mouse, Pig, Rabbit, Rat |
| Purification: | Protein G Purified |

Target Details

| Target: | PDIA3 |
|-------------------|------------------------|
| Alternative Name: | ERp57 (PDIA3 Products) |

Target Details

| 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 (1-5). 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-glycosylated 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 (6). 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 (7).

Gene ID:

2923

NCBI Accession:

NP_005304

UniProt:

P30101

Pathways:

Maintenance of Protein Location, Protein targeting to Nucleus, Cell RedoxHomeostasis

Application Details

Application Notes:

- WB (1:2000)
- IHC (1:100)
- ICC/IF (1:100)
- optimal dilutions for assays should be determined by the user.

Comment:

 $0.5 \,\mu g/ml$ of ABIN2484411 was sufficient for detection of ERp57 in 10 μg of heat shock Heal Lysate by colorimetric immunoblot analysis using Goat anti-mouse IgG:HRP as the secondary antibody.

Restrictions:

For Research Use only

Handling

| Format: | Liquid |
|----------------|---|
| Concentration: | 1 mg/mL |
| Buffer: | PBS pH 7.4, 50 % glycerol, 0.09 % sodium azide, Storage buffer may change when conjugated |

Handling

| Preservative: | Sodium azide |
|--------------------|--|
| Precaution of Use: | This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only. |
| Storage: | 4 °C |
| Storage Comment: | Conjugated antibodies should be stored at 4°C |

Images



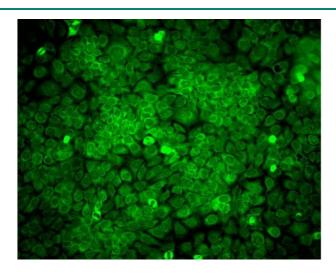
Immunohistochemistry

Image 1. Immunohistochemistry analysis using Mouse Anti-Erp57 Monoclonal Antibody, Clone Map.ERP57. Tissue: backskin. Species: Mouse. Fixation: Bouin's Fixative and paraffin-embedded. Primary Antibody: Mouse Anti-Erp57 Monoclonal Antibody at 1:100 for 1 hour at RT. Secondary Antibody: FITC Goat Anti-Mouse (green) at 1:50 for 1 hour at RT. Localization: Epidermis and Hair Follicles.



Western Blotting

Image 2. Western Blot analysis of Human cell lysates showing detection of Erp57 protein using Mouse Anti-Erp57 Monoclonal Antibody, Clone Map.ERP57 . Load: 15 μg. Block: 1.5% BSA for 30 minutes at RT. Primary Antibody: Mouse Anti-Erp57 Monoclonal Antibody at 1:1000 for 2 hours at RT. Secondary Antibody: Sheep Anti-Mouse IgG: HRP for 1 hour at RT.



Immunofluorescence (fixed cells)

Image 3. Immunocytochemistry/Immunofluorescence analysis using Mouse Anti-Erp57 Monoclonal Antibody, Clone Map.ERP57. Tissue: HaCaT cells. Species: Human. Fixation: Cold 100% methanol for 10 minutes at -20°C. Primary Antibody: Mouse Anti-Erp57 Monoclonal Antibody at 1:100 for 1 hour at RT. Secondary Antibody: FITC Goat Anti-Mouse (green) at 1:50 for 1 hour at RT. Localization: Cytoplasmic and perinuclear staining.

Please check the product details page for more images. Overall 4 images are available for ABIN2484411.