

### **ERp72 Antibody**

Catalog # ASC11935

#### **Specification**

## **ERp72 Antibody - Product Information**

Application WB, IHC, IF, E
Primary Accession P13667

Other Accession
Reactivity
Human, Mouse, Rat
Rabbit

Clonality Polyclonal Isotype IgG

Calculated MW
Application Notes

Predicted: 71 kDa; Observed: 75 kDa KDa
ERp72 antibody can be used for detection
of ERp72 by Western blot at 1 - 2 μg/ml.

Antibody can also be used for

immunohistochemistry starting at 5  $\mu$ g/mL.

For immunofluorescence start at 20

μg/mL.

#### **ERp72 Antibody - Additional Information**

Gene ID **9601** 

Target/Specificity

PDIA4; ERP72 antibody is human, mouse and rat reactive.

#### **Reconstitution & Storage**

ERp72 antibody can be stored at 4°C for three months and -20°C, stable for up to one year.

#### **Precautions**

ERp72 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

#### **ERp72 Antibody - Protein Information**

Name PDIA4

Synonyms ERP70, ERP72

#### **Cellular Location**

Endoplasmic reticulum lumen. Melanosome. Note=Identified by mass spectrometry in melanosome fractions from stage I to stage IV (PubMed:17081065)

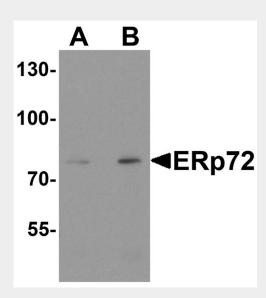
# **ERp72 Antibody - Protocols**

Provided below are standard protocols that you may find useful for product applications.

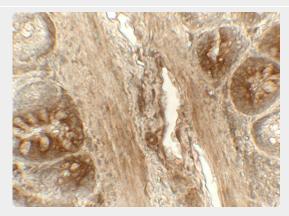


- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

# **ERp72 Antibody - Images**

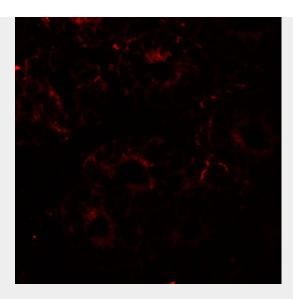


Western blot analysis of ERp72 in human colon tissue lysate with ERp72 antibody at (A) 1 and (B) 2  $\mu g/ml$ .



Immunohistochemistry of ERp72 in rat colon tissue with ERp72 antibody at 5  $\mu g/mL$ .





Immunofluorescence of ERp72 in rat colon tissue with ERp72 antibody at 20  $\mu g/mL$ .

### **ERp72 Antibody - Background**

Protein disulfide isomerase (PDI) has two thioredoxin homology domains and catalyzes the formation and isomerization of these disulfide bonds (1,2). ER stress protein 72 (ERp72), also designated protein disulfide-isomerase A4, is involved in the catalysis of protein -S-S- bond rearrangement (3). It plays a role in the formation and isomerization of disulfide bonds (3,4).

#### **ERp72 Antibody - References**

Huppa JB and Ploegh HL. The eS-Sence of -SH in the ER. Cell 1998; 92:145-8.

Ellgaard L and Ruddock LW. The human protein disulphide isomerase family: substrate interactions and functional properties. EMBO Rep. 2005; 6:28-32.

Mazzarella RA, Srinivasan M, Haugejorden SM, et al. ERp72, an abundant luminal endoplasmic reticulum protein, contains three copies of the active site sequences of protein disulfide isomerase. J. Biol. Chem. 1990; 265:1094-101.

Satoh M, Shimada A, Keino H, et al. Functional characterization of 3 thioredoxin homology domains of ERp72. Cell Stress Chaperones 2005; 10:278-84.