

ERp72 Antibody

Catalog # ASC11935

Product Information

Application	WB, IHC, IF, E
Primary Accession	P13667
Other Accession	NP_004902 , 4758304
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	72932
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
Application Notes	ERp72 antibody can be used for detection of ERp72 by Western blot at 1 - 2 μ g/ml. Antibody can also be used for immunohistochemistry starting at 5 μ g/mL. For immunofluorescence start at 20 μ g/mL.

Additional Information

Gene ID	9601
Other Names	Protein disulfide-isomerase A4, 5.3.4.1, Endoplasmic reticulum resident protein 70, ER protein 70, ERp70, Endoplasmic reticulum resident protein 72, ER protein 72, ERp-72, ERp72, PDIA4, ERP70, ERP72
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.

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)

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).

References

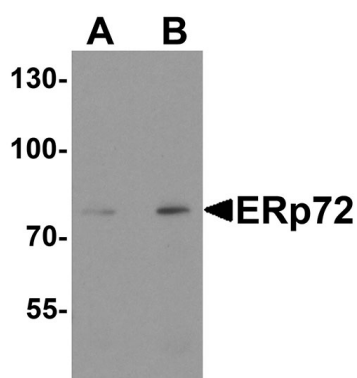
Huppa JB and Ploegh HL. The eS-Sence of -SH in the ER. *Cell* 1998; 92:145-8.

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

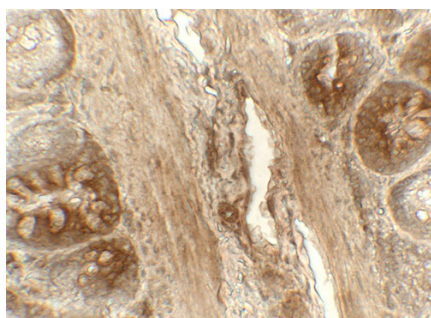
Mazzarella RA, Srinivasan M, Haugejorden SM, et al. ERp72, an abundant luminal endoplasmic reticulum protein, contains three copies of the active site sequences of protein disulfide isomerase. *J. Biol. Chem.* 1990; 265:1094-101.

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

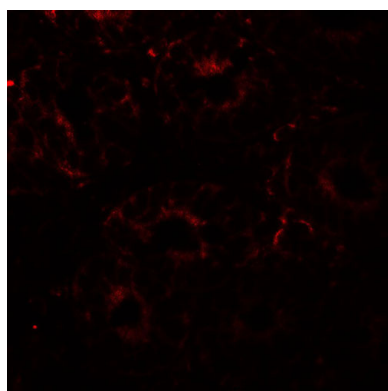
Images



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



Immunohistochemistry of ERp72 in rat colon tissue with ERp72 antibody at 5 μ g/mL.



Immunofluorescence of ERp72 in rat colon tissue with ERp72 antibody at 20 μ g/mL.