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Store at -20C
#2881

ERp57 (G117) Antibody

For Research Use Only. Not for Use in Diagnostic Procedures.

Applications: W	Reactivity: H M R	Sensitivity: Endogenous	MW (kDa): 57	Source/Isotype: Rabbit	UniProt ID: #P30101	Entrez-Gene Id: 2923
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Product Usage Information

Application

Western Blotting

Dilution

1:1000

Storage

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA and 50% glycerol. Store at -20°C. Do not aliquot the antibody.

Specificity/Sensitivity

ERp57 (G117) Antibody detects endogenous levels of total ERp57 protein.

Source / Purification

Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Gly117 of human ERp57. Antibodies are purified by protein A and peptide affinity chromatography.

Background

Secretory proteins translocate into the endoplasmic reticulum (ER) after their synthesis where they are post-translationally modified and properly folded. To reach their native conformation, many secretory proteins require the formation of intra- or inter-molecular disulfide bonds (1). This process is called oxidative protein folding. Disulfide isomerase (PDI) has two thioredoxin homology domains and catalyzes the formation and isomerization of these disulfide bonds (2). Other ER resident proteins that possess the thioredoxin homology domains, including endoplasmic reticulum stress protein 57 (ERp57), constitute the PDI family (2). ERp57 interacts with calnexin and calreticulin (3) and is suggested to play a role in the isomerization of disulfide bonds on certain glycoproteins (3).

Background References

- Huppa, J.B. and Ploegh, H.L. (1998) *Cell* 92, 145-8.
- Ellgaard, L. and Ruddock, L.W. (2005) *EMBO Rep* 6, 28-32.
- Jessop, C.E. et al. (2007) *EMBO J* 26, 28-40.

Species Reactivity

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

Western Blot Buffer

IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 5% w/v BSA, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.

Applications Key

W: Western Blotting

Cross-Reactivity Key

H: Human **M:** Mouse **R:** Rat

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