

#2881 Store at -20°C

ERp57 (G117) Antibody



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

Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source:	UniProt ID:	Entrez-Gene Id:
WB	H M R	Endogenous	57	Rabbit	#P30101	2923

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	1. Huppa, J.B. and Ploegh, H.L. (1998) <i>Cell</i> 92, 145-8. 2. Ellgaard, L. and Ruddock, L.W. (2005) <i>EMBO Rep</i> 6, 28-32. 3. Jessop, C.E. et al. (2007) <i>EMBO J</i> 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	WB: Western Blotting
Cross-Reactivity Key	H: human M: mouse R: rat Hm: hamster Mk: monkey Vir: virus Mi: mink C: chicken Dm: D. melanogaster X: Xenopus Z: zebrafish B: bovine Dg: dog Pg: pig Sc: S. cerevisiae Ce: C. elegans Hr: horse GP: Guinea Pig Rab: rabbit All: all species expected
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