

ERp57 (A484) Antibody

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For Research Use Only. Not For Use In Diagnostic Procedures.

Entrez-Gene ID #2923

Swiss-Prot Acc. #P30101

Applications	Species Cross-Reactivity*	Molecular Wt.	Source
W Endogenous	H, M, R	57 kDa	Rabbit**

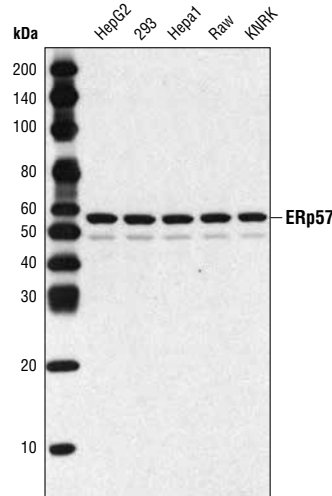
Background: Secretory proteins translocate into the endoplasmic reticulum (ER) after their synthesis where they are post-translationally modified and properly folded. To reach their native conformation, many secretory proteins require the formation of intra- or inter-molecular disulfide bonds (1). This 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).

Specificity/Sensitivity: ERp57 (A484) 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 Ala484 of human ERp57. Antibodies are purified by protein A and peptide affinity chromatography.

Background References:

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



Western blot analysis of extracts from various cell types using ERp57 (A484) Antibody.

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.

***Species cross-reactivity is determined by western blot.**

****Anti-rabbit secondary antibodies must be used to detect this antibody.**

Recommended Antibody Dilutions:

Western blotting 1:1000

For application specific protocols please see the web page for this product at www.cellsignal.com.

Please visit www.cellsignal.com for a complete listing of recommended companion products.

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

Applications Key: W—Western IP—Immunoprecipitation IHC—Immunohistochemistry ChIP—Chromatin Immunoprecipitation IF—Immunofluorescence F—Flow cytometry E-P—ELISA-Peptide

Species Cross-Reactivity Key: H—human M—mouse R—rat Hm—hamster Mk—monkey 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 All—all species expected Species enclosed in parentheses are predicted to react based on 100% homology.