

**#2886** Store at -20°C

## ERp44 Antibody


**Cell Signaling**  
TECHNOLOGY®

**Orders:** 877-616-CELL (2355)  
orders@cellsignal.com

**Support:** 877-678-TECH (8324)

**Web:** info@cellsignal.com  
cellsignal.com

3 Trask Lane | Danvers | Massachusetts | 01923 | USA

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Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source:	UniProt ID:	Entrez-Gene Id:
WB	H M R Mk	Endogenous	44	Rabbit	#Q9BS26	23071

### 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

ERp44 Antibody detects endogenous levels of total ERp44 protein.

### Source / Purification

Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to the sequence of human ERp44. 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 resident protein 44 (ERp44), constitute the PDI family (2). ERp44 is induced upon ER stress and is linked to Ero1- $\alpha$  and Ero1- $\beta$  through mixed disulfide bonds (3). ERp44 was shown to mediate the ER localization of Ero1- $\alpha$  (4).

### 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.
- Anelli, T. et al. (2002) *EMBO J* 21, 835-44.
- Anelli, T. et al. (2003) *EMBO J* 22, 5015-22.

### 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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