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#3798

ERp44 (D17A6) XP[®] Rabbit mAb

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

Applications: W, IHC-P	Reactivity: H M R Mk	Sensitivity: Endogenous	MW (kDa): 44	Source/Isotype: Rabbit IgG	UniProt ID: #Q9BS26	Entrez-Gene Id: 23071
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Product Usage Information

Application

Western Blotting
Immunohistochemistry (Paraffin)

Dilution

1:1000
1:800

Storage

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at -20°C. Do not aliquot the antibody.

For a carrier free (BSA and azide free) version of this product see product #89694.

Specificity/Sensitivity

ERp44 (D17A6) XP[®] Rabbit mAb detects endogenous levels of total ERp44 protein.

Source / Purification

Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to the sequence of human ERp44.

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-L α and Ero1-L β through mixed disulfide bonds (3). ERp44 was shown to mediate the ER localization of Ero1-L α (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

W: Western Blotting **IHC-P:** Immunohistochemistry (Paraffin)

Cross-Reactivity Key

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

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