

**#5033** Store at -20C

# ERp72 (D70D12) XP® Rabbit mAb


**Cell Signaling**  
TECHNOLOGY®

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Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source/Isotype:	UniProt ID:	Entrez-Gene Id:
WB, IF-IC, FC-FP	H M R Mk	Endogenous	72	Rabbit IgG	#P13667	9601

## Product Usage Information

### Application

Western Blotting  
Immunofluorescence (Immunocytochemistry)  
Flow Cytometry (Fixed/Permeabilized)

### Dilution

1:1000  
1:50 - 1:200  
1:50 - 1:200

## 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.

## Specificity / Sensitivity

ERp72 (D70D12) XP® Rabbit mAb detects endogenous levels of total ERp72 protein.

## Source / Purification

Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to the residues surrounding Met279 of human ERp72 protein.

## Background

Secretory proteins translocate into the endoplasmic reticulum (ER) during 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. Protein 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 thioredoxin homology domains, including ER stress protein 72 (ERp72), constitute the PDI family (3,4). ERp72 contains three thioredoxin homology domains (3) and plays a role in the formation and isomerization of disulfide bonds (3,4).

## 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. Mazzarella, R.A. et al. (1990) *J Biol Chem* 265, 1094-101.
4. Satoh, M. et al. (2005) *Cell Stress Chaperones* 10, 278-84.

## 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 **IF-IC:** Immunofluorescence (Immunocytochemistry)  
**FC-FP:** Flow Cytometry (Fixed/Permeabilized)

## 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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