

#3593 Store at -20°C

## Grp75 (D13H4) XP® Rabbit mAb



**Cell Signaling**  
TECHNOLOGY®

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

Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source/Isotype:	UniProt ID:	Entrez-Gene Id:
WB, IP, IHC-P, IF-IC	H M Mk	Endogenous	75	Rabbit IgG	#P38646	3313

### Product Usage Information

#### Application

Western Blotting  
Immunoprecipitation  
Immunohistochemistry (Paraffin)  
Immunofluorescence (Immunocytochemistry)

#### Dilution

1:1000  
1:50  
1:50  
1:100

### 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 #36890.

### Specificity / Sensitivity

Grp75 (D13H4) XP® Rabbit mAb detects endogenous levels of total Grp75 protein.

### Source / Purification

Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to the sequence of human Grp75.

### Background

Grp75, also known as mortalin, is a member of Hsp70 family of chaperone proteins that is not heat-inducible (1,2). This protein is essential for transporting many mitochondrial proteins from the cytoplasm to mitochondria (3). Grp75 inactivates the tumor suppressor p53 (4). Studies found that Grp75 is overexpressed in many tumor tissues and immortalized human cell lines, suggesting its role in the tumor formation (5). Grp75 is also implicated in cell aging, as its overexpression appears to prolong the life span of human fibroblasts (6).

### Background References

1. Kaul, S.C. et al. (1993) *Biochem Biophys Res Commun* 193, 348-55.
2. Wadhwa, R. et al. (1993) *J Biol Chem* 268, 6615-21.
3. Schneider, H.C. et al. (1994) *Nature* 371, 768-74.
4. Wadhwa, R. et al. (1998) *J Biol Chem* 273, 29586-91.
5. Wadhwa, R. et al. (2006) *Int J Cancer* 118, 2973-80.
6. Kaul, S.C. et al. (2003) *Exp Cell Res* 286, 96-101.

### 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 **IP:** Immunoprecipitation **IHC-P:** Immunohistochemistry (Paraffin)  
**IF-IC:** Immunofluorescence (Immunocytochemistry)

### 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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