



**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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#8721

## UBE2L3 (D5G1) Rabbit mAb

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

<b>Applications:</b> W, IP	<b>Reactivity:</b> H M R Mk	<b>Sensitivity:</b> Endogenous	<b>MW (kDa):</b> 18	<b>Source/Isotype:</b> Rabbit IgG	<b>UniProt ID:</b> #P68036	<b>Entrez-Gene Id:</b> 7332
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### Product Usage Information

#### Application

Western Blotting  
Immunoprecipitation

#### Dilution

1:1000  
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

UBE2L3 (D5G1) Rabbit mAb recognizes endogenous levels of total UBE2L3 protein. This antibody does not cross-react with UBE2L6/UBCH8.

### Species predicted to react based on 100% sequence homology

Xenopus, Zebrafish, Bovine, Dog, Horse

### Source / Purification

Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Leu125 of human UBE2L3 protein.

### Background

Protein ubiquitination requires the concerted action of the E1, E2, and E3 ubiquitin-conjugating enzymes. Ubiquitin is first activated through ATP-dependent formation of a thiol ester with ubiquitin-activating enzyme E1. The activated ubiquitin is then transferred to a thiol group of ubiquitin-carrier enzyme E2. The final step is the transfer of ubiquitin from E2 to an ε-amino group of the target protein lysine residue, which is mediated by ubiquitin-ligase enzyme E3 (1). UBE2L3, also commonly referred to as UBCH7, is a ubiquitin-conjugating enzyme that belongs to a family of four related human genes, *UBE2L1-UBE2L4*. It appears as though *UBE2L3* is the only member of this gene family to be transcribed and translated and that *UBE2L1*, *UBE2L2*, and *UBE2L4* exist as pseudogenes (2,3). As a ubiquitin-conjugating enzyme, UBE2L3 has been linked to the ubiquitination of numerous substrates via its interaction with protein-ubiquitin E3 ligases such as NEDD4 (4), E6AP (5), Parkin (6), c-Cbl (7), and Triad1 (8,9). There is also evidence suggesting that UBE2L3 can modulate the transcriptional activity of numerous members of the nuclear hormone receptor superfamily such as the glucocorticoid receptor, progesterone receptor, androgen receptor, and retinoic acid receptors (10). Furthermore, UBE2L3 protein levels appear to be regulated by the ubiquitin-proteasome pathway allowing for it to exert control over S-phase entry and progression (11).

### Background References

- Hershko, A. (1988) *J Biol Chem* 263, 15237-40.
- Ardley, H.C. et al. (2000) *Biochim Biophys Acta* 1491, 57-64.
- Moynihlan, T.P. et al. (1996) *Mamm Genome* 7, 520-5.
- Anan, T. et al. (1998) *Genes Cells* 3, 751-63.
- Huang, L. et al. (1999) *Science* 286, 1321-6.
- Shimura, H. et al. (2001) *Science* 293, 263-9.
- Yokouchi, M. et al. (1999) *J Biol Chem* 274, 31707-12.
- Marteijn, J.A. et al. (2009) *Leukemia* 23, 1480-9.
- Marteijn, J.A. et al. (2005) *Blood* 106, 4114-23.
- Verma, S. et al. (2004) *Mol Cell Biol* 24, 8716-26.
- Whitcomb, E.A. et al. (2009) *Mol Biol Cell* 20, 1-9.

### 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 **IP:** Immunoprecipitation

### Cross-Reactivity Key

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

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