

Upf1 (D15G6) Rabbit mAb

✓ 100 µl
 (10 western blots)



Orders ■ 877-616-CELL (2355)
 orders@cellsignaling.com
Support ■ 877-678-TECH (8324)
 info@cellsignaling.com
Web ■ www.cellsignaling.com

New 10/12

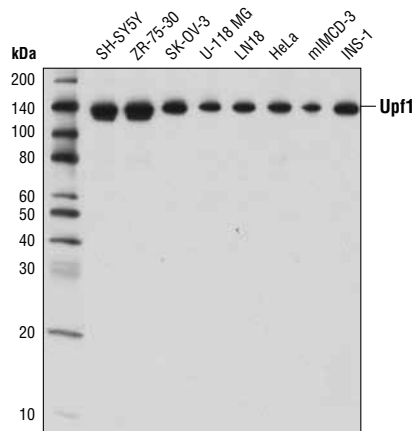
For Research Use Only. Not For Use In Diagnostic Procedures.

Applications W, IP, IF-IC Endogenous	Species Cross-Reactivity* H, M, R, Mk	Molecular Wt. 140 kDa	Isotype Rabbit IgG**
--	--	--------------------------	-------------------------

Background: Upf1 was identified as an active component in nonsense-mediated decay (NMD), an mRNA surveillance mechanism in eukaryotic cells that degrades mRNAs containing premature termination codons (1). Upf1 was found to be an ATP-dependent RNA helicase in the cytoplasm (2) and was later shown to be a component in the cytoplasmic P-bodies (3). Upf1 phosphorylation mediates translation repression that accompanies NMD, allowing mRNA accessibility to the NMD machinery (4). Two other active components of NMD, Upf2 and Upf3, were also identified (5). Upf2 is perinuclear and Upf3 is nucleocytoplasmic; both of these proteins play important roles in NMD (5).

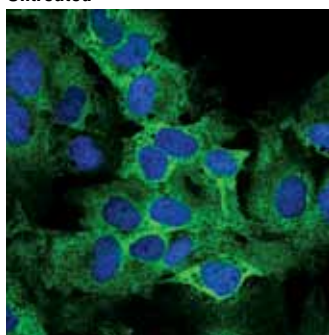
Specificity/Sensitivity: Upf1 (D15G6) Rabbit mAb recognizes endogenous levels of total Upf1 protein.

Source/Purification: Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues near the carboxy terminus of human Upf1 protein.

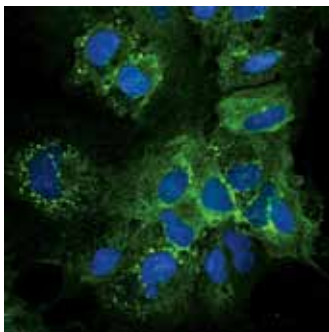


Western blot analysis of extracts from various cell lines using Upf1 (D15G6) Rabbit mAb.

Untreated



Heat shock-treated



Confocal immunofluorescent analysis of Huh7 cells, untreated (upper) or heat shock-treated (lower), using Upf1 (D15G6) Rabbit mAb (green). Blue pseudocolor = DRAQ5® #4084 (fluorescent DNA dye).

Immunoprecipitation of Upf1 from LN18 cell extracts using Rabbit (DA1E) mAb IgG XP® Isotype Control #3900 (lane 2) or Upf1 (D15G6) Rabbit mAb (lane 3). Lane 1 is 10% input. Western blot analysis was performed using Upf1 (D15G6) Rabbit mAb.

Entrez-Gene ID #5976
 Swiss-Prot Acc. #Q92900

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.

***Species cross-reactivity is determined by western blot.**

****Anti-rabbit secondary antibodies must be used to detect this antibody.**

Recommended Antibody Dilutions:

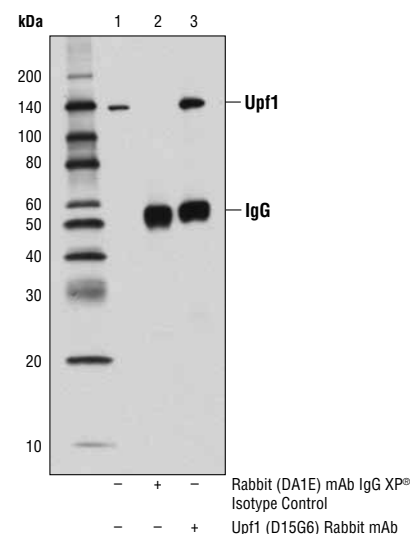
Western blotting	1:1000
Immunoprecipitation	1:50
Immunofluorescence (IF-IC)	1:400

For product specific protocols please see the web page for this product at www.cellsignaling.com.

Please visit www.cellsignaling.com for a complete listing of recommended complementary products.

Background References:

- (1) Leeds, P. et al. (1991) *Genes Dev* 5, 2303-14.
- (2) Weng, Y. et al. (1996) *Mol Cell Biol* 16, 5477-90.
- (3) Bruno, I. and Wilkinson, M.F. (2006) *Cell* 125, 1036-8.
- (4) Isken, O. et al. (2008) *Cell* 133, 314-27.
- (5) Lykke-Andersen, J. et al. (2000) *Cell* 103, 1121-31.



— + — Rabbit (DA1E) mAb IgG XP®
 — — + Isotype Control
 — — + Upf1 (D15G6) Rabbit mAb

IMPORTANT: For western blots, incubate membrane with diluted antibody in 5% w/v BSA, 1X TBS, 0.1% Tween-20 at 4°C with gentle shaking, overnight.

DRAQ5® is a registered trademark of Biostatus Limited.

Applications Key: W—Western IP—Immunoprecipitation IHC—Immunohistochemistry ChIP—Chromatin Immunoprecipitation IF—Immunofluorescence F—Flow cytometry E-P—ELISA-Peptide
Species Cross-Reactivity Key: H—human M—mouse R—rat Hm—hamster Mk—monkey 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 All—all species expected Species enclosed in parentheses are predicted to react based on 100% homology.