

#5641 Store at -20°C

## Ubc12 (D13D7) Rabbit mAb

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Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source/Isotype:	UniProt ID:	Entrez-Gene Id:
WB, IP	H M R Mk	Endogenous	21	Rabbit IgG	#P61081	9040

## Product Usage Information

## Application

Western Blotting

## Dilution

1:1000

Immunoprecipitation

1:50

## 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

Ubc12 (D13D7) Rabbit mAb detects endogeneous levels of total Ubc12 protein.

## Source / Purification

Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Lys36 of human Ubc12 protein.

## Background

Similar to ubiquitin, NEDD8 is covalently linked to target proteins through an enzymatic cascade composed of NEDD8-specific E1 (activating)- and E2 (conjugating)-enzymes (1,2). The E2 ligase specific for NEDD8 is Ubc12 (3-5). Ubc12 forms a heterodimeric conjugate with NEDD8 in order to catalyze the transfer of NEDD8 from E1 to lysine side chains of target proteins (1,2). Well known targets of NEDD8 are cullin-based RING E3 ligases. Neddylation of cullin isoforms activates the related ubiquitin E3 complex by promoting its interaction with a cognate ubiquitin-E2 ligase (6-7). Neddylation of Cul-1 complexes containing βTrCP and SKP2 has been shown to be required for controlling the stability of important signaling targets such as IκB, NF-κB, and p27 Kip (8-10), thereby regulating cell cycle progression, signaling cascades, and developmental programming processes (11).

## Background References

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## 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

## 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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