

UBE2N/Ubc13 (D2A1) Rabbit mAb

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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: |
|---------------|-------------|--------------|-----------|-----------------|-------------|-----------------|
| W, IP | H M R Mk | Endogenous | 17 | Rabbit IgG | #P61088 | 7334 |

Product Usage Information**Application**

Western Blotting
Immunoprecipitation

Dilution

1:1000
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.

Specificity/Sensitivity

UBE2N/Ubc13 (D2A1) Rabbit mAb recognizes endogenous levels of total UBE2N/Ubc13 protein. This antibody does not cross-react with UBE2D family members.

Species predicted to react based on 100% sequence homology

Chicken, Xenopus, Bovine, Dog, Horse

Source / Purification

Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues near the carboxy terminus of human UBE2N/Ubc13 protein.

Background

Protein ubiquitination is an important posttranslational modification that regulates protein function and fate (1). Ubiquitin (Ub) can be conjugated to target proteins in either monomeric or polymeric forms. There are several different lysine residues within Ub that can be used as conjugation sites for poly-Ub chain formation. Different poly-Ub linkages mediate different functions of the target protein ranging from alterations in protein function to degradation (2). UBE2N/Ubc13 is a ubiquitin-E2-conjugating enzyme that catalyzes K63-linked poly-Ub chain formation (1,2). UBE2N forms a heterodimer with MMS2 or Uev1A to exert its E2 ligase function. The UBE2N/MMS2 and UBE2N/Uev1A heterodimers catalyze different modes of target protein ubiquitination to mediate various signaling pathways (3-5) including: DNA damage and recombination, p53 and check point control, the cell cycle (6-10), immunoreceptor signaling (11,12), and endocytosis (13). Most recently, UBE2N was shown to play an important role in inflammatory signaling by promoting K63-linked ubiquitination and activation of IKK downstream of the IL-1β receptor (14). Furthermore, interaction of UBE2N with the Triad1 E3 protein-ubiquitin ligase was shown to play an important role in myelopoiesis (15).

Background References

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- Xu, M. et al. (2009) *Mol Cell* 36, 302-14.
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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

W: Western Blotting **IP:** Immunoprecipitation

Cross-Reactivity Key

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

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