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# UBE2I Antibody

Purified Mouse Monoclonal Antibody
Catalog # AO1631a

## Product Information

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|---|---|
| **Application** | WB, IHC, FC, ICC, E |
| **Primary Accession** | P63279 |
| **Reactivity** | Human, Monkey |
| **Host** | Mouse |
| **Clonality** | Monoclonal |
| **Clone Names** | 1B10 |
| **Isotype** | IgG1 |
| **Calculated MW** | 18007 |
| **Description** | The modification of proteins with ubiquitin is an important cellular mechanism for targeting abnormal or short-lived proteins for degradation. Ubiquitination involves at least three classes of enzymes: ubiquitin-activating enzymes, or E1s, ubiquitin-conjugating enzymes, or E2s, and ubiquitin-protein ligases, or E3s. This gene encodes a member of the E2 ubiquitin-conjugating enzyme family. Four alternatively spliced transcript variants encoding the same protein have been found for this gene. |
| **Immunogen** | Purified recombinant fragment of human UBE2I expressed in E. Coli. |
| **Formulation** | Ascitic fluid containing 0.03% sodium azide. |

## Additional Information

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| **Gene ID** | 7329 |
| **Other Names** | SUMO-conjugating enzyme UBC9, 6.3.2.-, SUMO-protein ligase, Ubiquitin carrier protein 9, Ubiquitin carrier protein I, Ubiquitin-conjugating enzyme E2 I, Ubiquitin-protein ligase I, p18, UBE2I, UBC9, UBCE9 |
| **Dilution** | WB~~1/500 - 1/2000 IHC~~1/200 - 1/1000 FC~~1/200 - 1/400 ICC~~N/A E~~1/10000 |
| **Storage** | Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles. |
| **Precautions** | UBE2I Antibody is for research use only and not for use in diagnostic or therapeutic procedures. |

## Protein Information

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| **Name** | UBE2I |
| **Synonyms** | UBC9, UBCE9 |
| **Function** | Accepts the ubiquitin-like proteins SUMO1, SUMO2, SUMO3, SUMO4 and SUMO1P1/SUMO5 from the UBLE1A-UBLE1B E1 complex and catalyzes their covalent attachment to other proteins with the help of an E3 ligase such as RANBP2, CBX4 and ZNF451. Can catalyze the formation of poly-SUMO chains. Necessary for sumoylation of FOXL2 and KAT5. Essential for nuclear architecture and chromosome segregation. Sumoylates p53/TP53 at 'Lys-386'. Mediates sumoylation of ERCC6 which is essential for its transcription-coupled nucleotide excision repair activity (PubMed:26620705). Sumoylates SHMT1 at 'Lys-38' or 'Lys-39' leading to RAN-dependent nuclear import of SHMT1 (PubMed:17446168). Also sumoylates TYMS and DHFR (PubMed:18067453). |
| **Cellular Location** | Nucleus. Cytoplasm Cytoplasm, perinuclear region Note=Mainly nuclear (By similarity). In spermatocytes, localizes in synaptonemal complexes (PubMed:8610150). Recruited by BCL11A into the nuclear body (By similarity). {ECO:0000250\|UniProtKB:P63280, ECO:0000269\|PubMed:8610150} |
| **Tissue Location** | Expressed in heart, skeletal muscle, pancreas, kidney, liver, lung, placenta and brain. Also expressed in testis and thymus. |

## References

1. Cell Signal. 2009 Dec;21(12):1935-44.  2. Nat Struct Mol Biol. 2009 Sep;16(9):945-52.

## Images

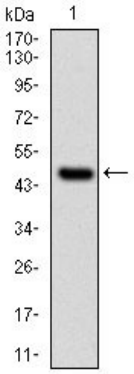



Figure 1: Western blot analysis using UBE2I mAb against human UBE2I (AA: 1-158) recombinant protein. (Expected MW is 45.3 kDa)

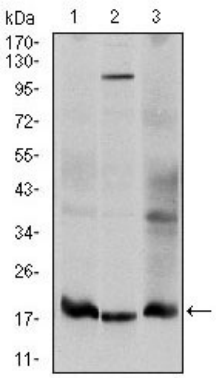



Figure 2: Western blot analysis using UBE2I mouse mAb against Hela (1), HepG2 (2), and Cos7 (3) cell lysate.

Figure 3: Immunohistochemical analysis of paraffin-embedded prostate tissues using UBE2I mouse mAb with DAB staining.

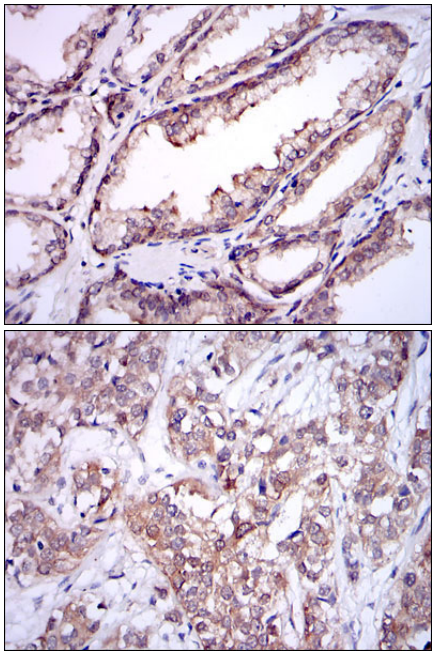


Figure 4: Immunohistochemical analysis of paraffin-embedded bladder cancer tissues using UBE2I mouse mAb with DAB staining.

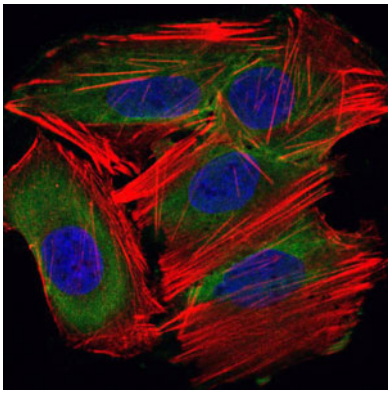


Figure 5: Immunofluorescence analysis of HepG2 cells using UBE2I mouse mAb (green). Blue: DRAQ5 fluorescent DNA dye. Red: Actin filaments have been labeled with Alexa Fluor-555 phalloidin.

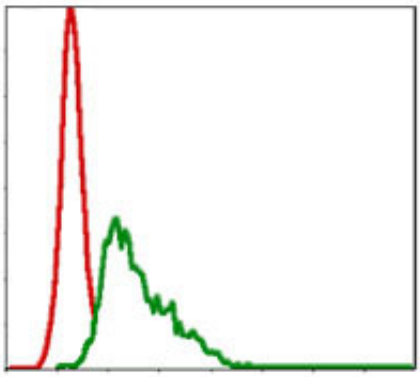


Figure 6: Flow cytometric analysis of HepG2 cells using UBE2I mouse mAb (green) and negative control (red).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.