

# UBE2I Antibody

Purified Mouse Monoclonal Antibody Catalog # AO1631a

## **Product Information**

Application Primary Accession Reactivity Host Clonality Clone Names Isotype Calculated MW Description	<ul> <li>WB, IHC, FC, ICC, E</li> <li>P63279</li> <li>Human, Monkey</li> <li>Mouse</li> <li>Monoclonal</li> <li>1B10</li> <li>IgG1</li> <li>18007</li> <li>The modification of proteins with ubiquitin is an important cellular mechanism for targeting abnormal or short-lived proteins for degradation.</li> <li>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.</li> </ul>
Immunogen	Purified recombinant fragment of human UBE2I expressed in E. Coli.
Formulation	Ascitic fluid containing 0.03% sodium azide.

## **Additional Information**

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**

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: <u>26620705</u> ).
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 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'.