

UBE2I Antibody

Purified Mouse Monoclonal Antibody
Catalog # AO1631a

Product Information

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

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: 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

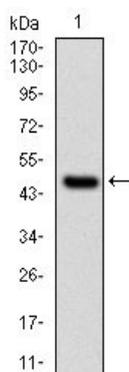


Figure 1: Western blot analysis using UBE2I mAb against human UBE2I (AA: 1-158) recombinant protein. (Expected MW is 45.3 kDa)

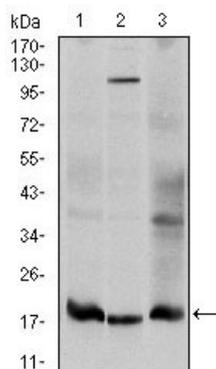


Figure 2: Western blot analysis using UBE2I mouse mAb against HeLa (1), HepG2 (2), and Cos7 (3) cell lysate.

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

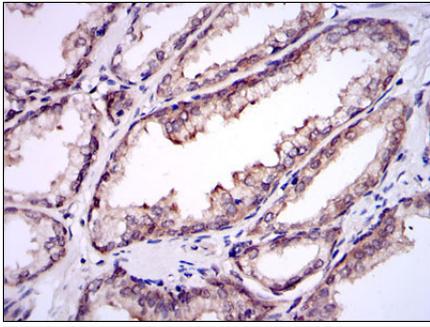


Figure 4: Immunohistochemical analysis of paraffin-embedded bladder cancer tissues using UBE2I mouse mAb with DAB staining.

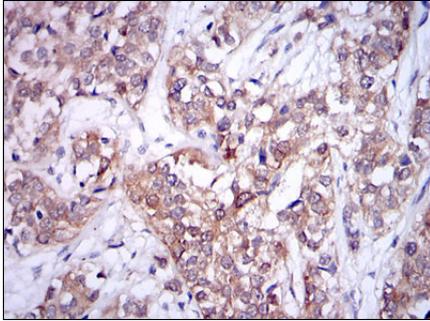


Figure 5: Immunofluorescence analysis of HepG2 cells using UBE2I mouse mAb (green). Blue: DRAQ5 fluorescent DNA dye. Red: Actin filaments have been labeled with Alexa Fluor-555 phalloidin.

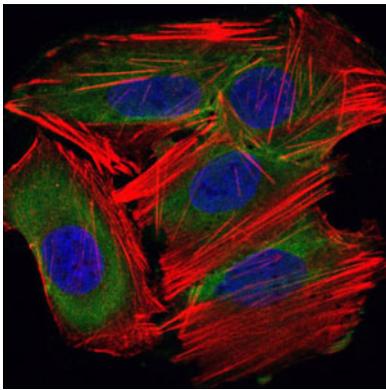
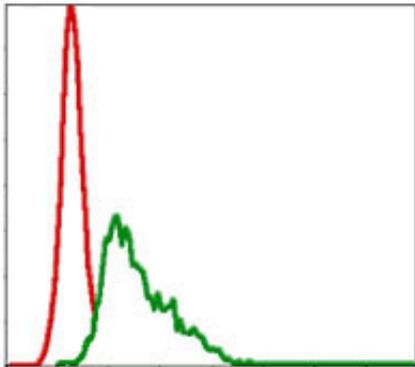


Figure 6: Flow cytometric analysis of HepG2 cells using UBE2I mouse mAb (green) and negative control (red).



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