

# UBC9 Antibody

Purified Mouse Monoclonal Antibody (Mab)  
Catalog # AM1261a

## Product Information

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<b>Application</b>	WB, E
<b>Primary Accession</b>	<a href="#">P63279</a>
<b>Reactivity</b>	Human, Rat, Mouse
<b>Host</b>	Mouse
<b>Clonality</b>	Monoclonal
<b>Isotype</b>	Mouse IgG1
<b>Clone Names</b>	67AT1273.95.90
<b>Calculated MW</b>	18007

## Additional Information

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<b>Gene ID</b>	7329
<b>Other Names</b>	SUMO-conjugating enzyme UBC9, 632-, SUMO-protein ligase, Ubiquitin carrier protein 9, Ubiquitin carrier protein I, Ubiquitin-conjugating enzyme E2 I, Ubiquitin-protein ligase I, p18, UBE2I, UBC9, UBCE9
<b>Target/Specificity</b>	This UBC9 antibody was raised using purified GST-UBC9 fusion protein.
<b>Dilution</b>	WB~~1:100~500 E~~Use at an assay dependent concentration.
<b>Format</b>	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein G column, followed by dialysis against PBS.
<b>Storage</b>	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
<b>Precautions</b>	UBC9 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

## Protein Information

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<b>Name</b>	UBE2I
<b>Synonyms</b>	UBC9, UBCE9
<b>Function</b>	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.

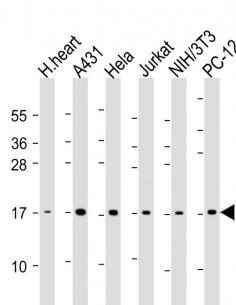
## Background

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.

## References

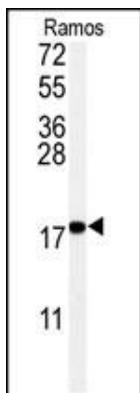
Expression analysis of Ubc9, the single small ubiquitin-like modifier (SUMO) E2 conjugating enzyme, in normal and malignant tissues. Moschos SJ, et al. Hum Pathol, 2010 Sep. PMID 20561671. Ubc9 promotes breast cell invasion and metastasis in a sumoylation-independent manner. Zhu S, et al. Oncogene, 2010 Mar 25. PMID 20023705. Association of SUMO1 and UBC9 genotypes with tumor response in non-small-cell lung cancer treated with irinotecan-based chemotherapy. Han JY, et al. Pharmacogenomics J, 2010 Apr. PMID 19859084. Characterization of papillomavirus E1 helicase mutants defective for interaction with the SUMO-conjugating enzyme Ubc9. Fradet-Turcotte A, et al. Virology, 2009 Dec 20. PMID 19836047. Ubc9 gene polymorphisms and late-onset Alzheimer's disease in the Korean population: a genetic association study. Ahn K, et al. Neurosci Lett, 2009 Nov 20. PMID 19765634.

## Images



All lanes : Anti-UBC9 Antibody at 1:1000-1:2000 dilution  
 Lane 1: human heart lysate Lane 2: A431 whole cell lysate  
 Lane 3: HeLa whole cell lysate Lane 4: Jurkat whole cell lysate  
 Lane 5: NIH/3T3 whole cell lysate Lane 6: PC-12 whole cell lysate Lysates/proteins at 20 µg per lane.  
 Secondary Goat Anti-mouse IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 18 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

Western blot analysis of anti-UBC9 Antibody (Cat. #AM1261a) in Ramos cell line lysates (35µg/lane). UBC9(arrow) was detected using the purified Mab.



## Citations

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- [Inhibiting ubiquitination causes an accumulation of SUMOylated newly synthesized nuclear proteins at PML bodies.](#)
- [RanBP2 regulates the anti-retroviral activity of TRIM5 \$\alpha\$  by SUMOylation at a predicted phosphorylated SUMOylation motif.](#)
- [Differential effects of SUMO1 and SUMO3 on PKR activation and stability.](#)
- [MxA Mediates SUMO-Induced Resistance to Vesicular Stomatitis Virus.](#)
- [TRIM5 \$\alpha\$  is a SUMO substrate.](#)
- [The SUMOylation of matrix protein M1 modulates the assembly and morphogenesis of influenza A virus.](#)

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