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UBC9 Antibody
Purified Mouse Monoclonal Antibody (Mab)
Catalog # AM1261a

Specification

UBC9 Antibody - Product Information

Application	**WB,E**
Primary Accession	P63279
Reactivity	**Human, Mouse, Rat**
Host	**Mouse**
Clonality	**Monoclonal**
Isotype	**Mouse IgG1**

UBC9 Antibody - Additional Information

Gene ID 7329

Other Names
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

Target/Specificity
This UBC9 antibody was raised using purified GST-UBC9 fusion protein.

Dilution
WB~~1:1000-1:2000
E~~Use at an assay dependent concentration.

Format
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.

Storage
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.

Precautions
UBC9 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

UBC9 Antibody - 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).

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}

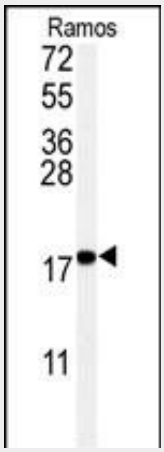
Tissue Location
Expressed in heart, skeletal muscle, pancreas, kidney, liver, lung, placenta and brain. Also expressed in testis and thymus.

UBC9 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

UBC9 Antibody - Images



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

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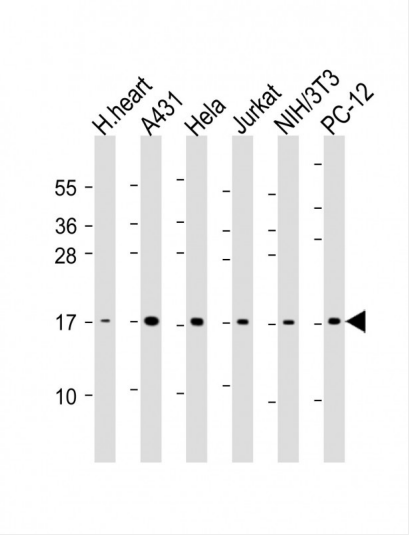

All lanes : Anti-UBC9 Antibody at 1:1000-1:2000 dilution Lane 1: human heart lysate Lane 2: A431 whole cell lysate Lane 3: Hela whole cell lysate Lane 4: Jurkat whole cell lysate Lane 5: NIH/3T3 whole cell lysate Lane 6: PC-12 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-mouse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

UBC9 Antibody - 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.

UBC9 Antibody - 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.

UBC9 Antibody - Citations

- Inhibiting ubiquitination causes an accumulation of SUMOylated newly synthesized nuclear proteins at PML bodies
- RanBP2 regulates the anti-retroviral activity of TRIM5α 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.
- TRIM5α is a SUMO substrate.
- The SUMOylation of matrix protein M1 modulates the assembly and morphogenesis of influenza A virus.