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Anti-UBE2I/UBC9 Antibody

Catalog # ABO11568

Product Information

Application	WB
Primary Accession	P63279
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized
Description	Rabbit IgG polyclonal antibody for SUMO-conjugating enzyme UBC9(UBE2I) detection. Tested with WB in Human;Mouse;Rat.
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Additional Information

Gene ID	7329
Other Names	SUMO-conjugating enzyme UBC9, 2.3.2.-, RING-type E3 SUMO transferase UBC9, SUMO-protein ligase, Ubiquitin carrier protein 9, Ubiquitin carrier protein I, Ubiquitin-conjugating enzyme E2 I, Ubiquitin-protein ligase I, p18, UBE2I, UBC9, UBCE9
Calculated MW	18007
Application Details	Western blot, 0.1-0.5 □g/ml, Rat, Human, Mouse
Subcellular Localization	Nucleus. Cytoplasm. Mainly nuclear. In spermatocytes, localizes in synaptonemal complexes. Recruited by BCL11A into the nuclear body (By similarity). .
Tissue Specificity	Expressed in heart, skeletal muscle, pancreas, kidney, liver, lung, placenta and brain. Also expressed in testis and thymus. .
Source	Eukaryota
Protein Name	SUMO-conjugating enzyme UBC9
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg Thimerosal, 0.05mg NaN3.
Immunogen	A synthetic peptide corresponding to a sequence at the C-terminus of human UBE2I(108-122aa IKQILLGIQELLNE), identical to the related mouse and rat sequences.
Purification	Immunogen affinity purified.

Cross Reactivity	No cross reactivity with other proteins
Storage	At -20˚C for one year. After r˚Constitution, at 4˚C for one month. It˚Can also be aliquotted and stored frozen at -20˚C for a longer time.Avoid repeated freezing and thawing.
Sequence Similarities	Belongs to the ubiquitin-conjugating enzyme family.

Protein Information

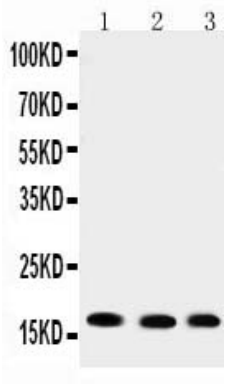
Name	UBE2I
Synonyms	UBC9, UBCE9
Function	Accepts the ubiquitin-like proteins SUMO1, SUMO2, SUMO3, SUMO4 and SUMO1P1/SUMO5 from the UBLE1A-UBLE1B E1 complex and catalyzes their covalent attachment to other proteins with the help of an E3 ligase such as RANBP2, CBX4 and ZNF451. Can catalyze the formation 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.

Background

SUMO-conjugating enzyme UBC9(UBE2I), also called UBC9, is a protein that in humans is encoded by the UBE2I gene. This gene encodes a member of the E2 ubiquitin-conjugating enzyme family. It is mapped to 16p13.3. UBC9 could fully complement the mutant phenotype of a yeast ubc9 mutant strain. This gene may play a similar role via interaction with WT1, which is able to impose a block to cell cycle progression in eukaryotic cells. What's more, it could support the growth of yeast ubc9 temperature-sensitive mutants at nonpermissive temperatures, indicating that the gene is a functional homolog of yeast ubc9. UBC9 is specifically associated with FHIT, such as FHIT may be involved in cell cycle control through its interaction with UBC9.

Images

Anti-UBE2I/UBC9 antibody, ABO11568, All Western blottingAll lanes: Anti-UBE2I(ABO11568) at 0.5ug/mlLane 1: Rat Cardiac Muscle Tissue Lysate at 40ugLane 2: Rat Skeletal Muscle Tissue Lysate at 40ugLane 3: Rat Pancreas Tissue Lysate at 40ugPredicted bind size: 18KDObserved bind size: 18KD



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