

Anti-UBE2I/UBC9 Antibody

Catalog # ABO11568

Specification

Anti-UBE2I/UBC9 Antibody - Product Information

Application WB
Primary Accession P63279
Host Rabbit

Reactivity Human, Mouse, Rat

Clonality Polyclonal 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.

Anti-UBE2I/UBC9 Antibody - 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 MW KDa

Application Details

Western blot, 0.1-0.5 µg/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. .

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.

Anti-UBE2I/UBC9 Antibody - Protein Information

Name UBE21

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.

Anti-UBE2I/UBC9 Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety



• Cell Culture

Anti-UBE2I/UBC9 Antibody - 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

Anti-UBE2I/UBC9 Antibody - 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.