

# UBC9 (UBE2I) Antibody (C-term) Blocking peptide

Synthetic peptide Catalog # BP1064b

## **Specification**

# UBC9 (UBE2I) Antibody (C-term) Blocking peptide - Product Information

**Primary Accession** 

P63279

# UBC9 (UBE2I) Antibody (C-term) Blocking peptide - 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

The synthetic peptide sequence used to generate the antibody <a href=/product/products/AP1064b>AP1064b</a> was selected from the C-term region of human UBE2I. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

### **Format**

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

### Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

## **Precautions**

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

# UBC9 (UBE2I) Antibody (C-term) Blocking peptide - 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:<a href="http://www.uniprot.org/citations/26620705" target="\_blank">26620705</a>).



## **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 (UBE2I) Antibody (C-term) Blocking peptide - Protocols

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

### • Blocking Peptides

UBC9 (UBE2I) Antibody (C-term) Blocking peptide - Images

# UBC9 (UBE2I) Antibody (C-term) Blocking peptide - Background

UBE2I (Ubc9) is a member of the E2 family and is specific for the conjugation of SUMO to a variety of target proteins. SUMO conjugation to target proteins is mediated by a different, but analogous, pathway to ubiquitinylation. This E2 is unusual in that it interacts directly with protein substrates that are modified by sumoylation, and may play a role in substrate recognition. UBE2I can mediate the conjugation of SUMO-1 to a variety of proteins including RanGAP1,  $I\kappa B\alpha$ , and PML without the requirement of an E3 ligase. UBE2I is essential for nuclear architecture and chromosome segregation.

# UBC9 (UBE2I) Antibody (C-term) Blocking peptide - References

Biochem Biophys Res Commun. 2002 Aug 30;296(4):870-6. Genomics. 1996 Oct 15;37(2):183-6. Cytogenet Cell Genet. 1996;75(4):222-3. Cytogenet Cell Genet. 1996;72(1):86-9.