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UBC9 (UBE2I) Antibody (N-term)
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP1064a

Specification

UBC9 (UBE2I) Antibody (N-term) - Product Information

Application	**WB, IHC-P,E**
Primary Accession	P63279
Other Accession	P63282, P63281, P63280, P63283, Q9DDJ0, Q9W6H5
Reactivity	**Human**
Predicted	**Zebrafish, Chicken, Mouse, Rat, Xenopus**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Antigen Region	**1-30**

UBC9 (UBE2I) Antibody (N-term) - 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 (UBE2I) antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 1-30 amino acids from the N-terminal region of human UBC9 (UBE2I).

Dilution
WB~~1:1000
IHC-P~~1:50~100
E~~Use at an assay dependent concentration.

Format
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation 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 (UBE2I) Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

UBC9 (UBE2I) Antibody (N-term) - Protein Information

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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}

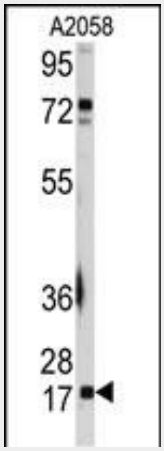
Tissue Location
Expressed in heart, skeletal muscle, pancreas, kidney, liver, lung, placenta and brain. Also expressed in testis and thymus.

UBC9 (UBE2I) Antibody (N-term) - Protocols

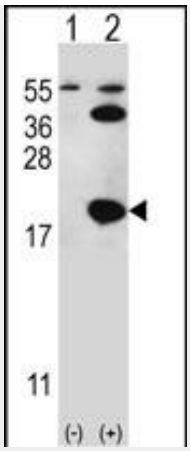
Provided below are standard protocols that you may find useful for product applications.

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

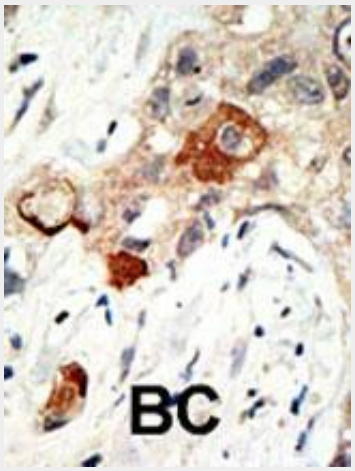
UBC9 (UBE2I) Antibody (N-term) - Images



Western blot analysis of anti-UBE2I Antibody (N-term) (Cat.#AP1064a) in A2058 cell line lysates (35ug/lane). UBE2I(arrow) was detected using the purified Pab.



Western blot analysis of UBE2I (arrow) using rabbit polyclonal UBE2I Antibody (S7) (Cat.#AP1064a). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected (Lane 2) with the UBE2I gene.



Formalin-fixed and paraffin-embedded human cancer tissue reacted with the primary antibody, which was peroxidase-conjugated to the secondary antibody, followed by AEC staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated. BC = breast carcinoma; HC = hepatocarcinoma.

UBC9 (UBE2I) Antibody (N-term) - 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?B?, and PML without the requirement of an E3 ligase. UBE2I is essential for nuclear architecture and chromosome segregation.

UBC9 (UBE2I) Antibody (N-term) - 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.

UBC9 (UBE2I) Antibody (N-term) - Citations

- UBC9-dependent association between calnexin and protein tyrosine phosphatase 1B

(PTP1B) at the endoplasmic reticulum.
- MDA5 is SUMOylated by PIAS2Î² in the upregulation of type I interferon signaling.