

### UBE2B Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP2115b

### Specification

# **UBE2B Antibody (C-term) - Product Information**

Application Primary Accession Other Accession

Reactivity Predicted Host Clonality Isotype Calculated MW Antigen Region IHC-P, WB,E <u>P63146</u> <u>P63149</u>, <u>P63148</u>, <u>P63147</u>, <u>O32P99</u>, <u>O9Z255</u>, <u>P49459</u>, <u>NP\_003328</u> Human Mouse, Bovine, Rabbit, Rat Rabbit Polyclonal Rabbit IgG 17312 117-146

### UBE2B Antibody (C-term) - Additional Information

Gene ID 7320

**Other Names** Ubiquitin-conjugating enzyme E2 B, RAD6 homolog B, HR6B, hHR6B, Ubiquitin carrier protein B, Ubiquitin-conjugating enzyme E2-17 kDa, Ubiquitin-protein ligase B, UBE2B, RAD6B

### Target/Specificity

This UBE2B antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 117-146 amino acids from the C-terminal region of human UBE2B.

Dilution IHC-P~~1:50~100 WB~~1:1000 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

UBE2B Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

# **UBE2B Antibody (C-term) - Protein Information**



Name UBE2B (HGNC:12473)

**Function** E2 ubiquitin-conjugating enzyme that accepts ubiquitin from the ubiquitin-activating enzyme E1 and transfers it to a E3 ubiquitin- protein ligase (PubMed:<u>16337599</u>, PubMed:<u>17108083</u>, PubMed:<u>17130289</u>, PubMed:<u>1717990</u>, PubMed:<u>20061386</u>). In vitro catalyzes 'Lys-11'-, as well as 'Lys-48'- and 'Lys-63'-linked polyubiquitination (PubMed:<u>20061386</u>). Together with the E3 enzyme BRE1 (RNF20 and/or RNF40), plays a role in transcription regulation by catalyzing the monoubiquitination of histone H2B at 'Lys-120' to form H2BK120ub1 (PubMed:<u>16337599</u>). H2BK120ub1 gives a specific tag for epigenetic transcriptional activation, elongation by RNA polymerase II, telomeric silencing, and is also a prerequisite for H3K4me and H3K79me formation (PubMed:<u>16337599</u>). May play a role in DNA repair (PubMed:<u>8062904</u>). Associates to the E3 ligase RAD18 to form the UBE2B-RAD18 ubiquitin ligase complex involved in mono-ubiquitination of DNA-associated PCNA on 'Lys-164' (PubMed:<u>17108083</u>, PubMed:<u>17130289</u>). In association with the E3 enzyme UBR4, is involved in N-end rule-dependent protein degradation (PubMed:<u>38182926</u>). May be involved in neurite outgrowth (By similarity).

### **Cellular Location**

Cell membrane {ECO:0000250|UniProtKB:P63149}. Nucleus {ECO:0000250|UniProtKB:P63149}. Note=In peripheral neurons, expressed both at the plasma membrane and in nuclei {ECO:0000250|UniProtKB:P63149}

### **UBE2B Antibody (C-term) - Protocols**

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

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

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UBE2B Antibody (C-term) - Images
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Western blot analysis of UBE2B Antibody (C-term) (Cat. #AP2115b) in Ramos cell line lysates (35ug/lane). UBE2B (arrow) was detected using the purified Pab.





Western blot analysis of UBE2B (arrow) using rabbit polyclonal UBE2B Antibody (E132) (Cat. #AP2115b). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected (Lane 2) with the UBE2B gene.



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

# UBE2B Antibody (C-term) - 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. UBE2B is a member of the E2 ubiquitin-conjugating enzyme family. This enzyme is required for post-replicative DNA damage repair. Its protein sequence is 100% identical to the mouse, rat, and rabbit homologs, which indicates that this enzyme is highly conserved in eukaryotic evolution.

# **UBE2B Antibody (C-term) - References**

Koken, M.H., et al., Genomics 12(3):447-453 (1992). Koken, M.H., et al., Proc. Natl. Acad. Sci. U.S.A. 88(20):8865-8869 (1991). Schneider, R., et al., EMBO J. 9(5):1431-1435 (1990).