

UBE2B Antibody (N-term) Blocking Peptide
Synthetic peptide
Catalog # BP2115a**Specification**

UBE2B Antibody (N-term) Blocking Peptide - Product Information

Primary Accession [P63146](#)
Other Accession [NP_003328](#)

UBE2B Antibody (N-term) Blocking Peptide - 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

The synthetic peptide sequence used to generate the antibody [AP2115a](/product/products/AP2115a) was selected from the N-term region of human UBE2B. 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.

UBE2B Antibody (N-term) Blocking Peptide - 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:[16337599](http://www.uniprot.org/citations/16337599), PubMed:[17108083](http://www.uniprot.org/citations/17108083), PubMed:[17130289](http://www.uniprot.org/citations/17130289), PubMed:[1717990](http://www.uniprot.org/citations/1717990), PubMed:[20061386](http://www.uniprot.org/citations/20061386)). In vitro catalyzes 'Lys-11', as well as 'Lys-48' and 'Lys-63'-linked polyubiquitination (PubMed:[20061386](http://www.uniprot.org/citations/20061386)). 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:16337599). 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:16337599). May play a role in DNA repair (PubMed:8062904). 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:17108083, PubMed:17130289). In association with the E3 enzyme UBR4, is involved in N-end rule-dependent protein degradation (PubMed:38182926). 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 (N-term) Blocking Peptide - Protocols

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

- [Blocking Peptides](#)

UBE2B Antibody (N-term) Blocking Peptide - Images

UBE2B Antibody (N-term) Blocking Peptide - 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 (N-term) Blocking Peptide - 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).