

# **UBE2N Antibody (N-term) Blocking Peptide**

Synthetic peptide Catalog # BP2125a

### **Specification**

## **UBE2N Antibody (N-term) Blocking Peptide - Product Information**

Primary Accession P61088
Other Accession NP 003339

## UBE2N Antibody (N-term) Blocking Peptide - Additional Information

#### **Gene ID** 7334

#### **Other Names**

Ubiquitin-conjugating enzyme E2 N, Bendless-like ubiquitin-conjugating enzyme, Ubc13, UbcH13, Ubiquitin carrier protein N, Ubiquitin-protein ligase N, UBE2N, BLU

#### **Target/Specificity**

The synthetic peptide sequence used to generate the antibody <a href=/product/products/AP2125a>AP2125a</a> was selected from the N-term region of human UBE2N . 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.

# **UBE2N Antibody (N-term) Blocking Peptide - Protein Information**

#### Name UBE2N

### **Synonyms BLU**

#### **Function**

The UBE2V1-UBE2N and UBE2V2-UBE2N heterodimers catalyze the synthesis of non-canonical 'Lys-63'-linked polyubiquitin chains. This type of polyubiquitination does not lead to protein degradation by the proteasome. Mediates transcriptional activation of target genes. Plays a role in the control of progress through the cell cycle and differentiation. Plays a role in the error-free DNA repair pathway and contributes to the survival of cells after DNA damage. Acts together with the E3 ligases, HLTF and SHPRH, in the 'Lys-63'-linked poly- ubiquitination of PCNA upon genotoxic stress, which is required for DNA repair. Appears to act together with E3 ligase RNF5 in the 'Lys-63'- linked polyubiquitination of JKAMP thereby regulating JKAMP function by decreasing its



association with components of the proteasome and ERAD. Promotes TRIM5 capsid-specific restriction activity and the UBE2V1- UBE2N heterodimer acts in concert with TRIM5 to generate 'Lys-63'- linked polyubiquitin chains which activate the MAP3K7/TAK1 complex which in turn results in the induction and expression of NF-kappa-B and MAPK-responsive inflammatory genes. Together with RNF135 and UB2V1, catalyzes the viral RNA-dependent 'Lys-63'-linked polyubiquitination of RIGI to activate the downstream signaling pathway that leads to interferon beta production (PubMed:<a href="http://www.uniprot.org/citations/28469175" target="\_blank">28469175" target="\_blank">28469175</a>, PubMed:<a href="http://www.uniprot.org/citations/31006531" target="\_blank">31006531</a><a href="http://www.uniprot.org/citations/3102631" target="\_blank">31006531</a> (a>). UBE2V1- UBE2N together with TRAF3IP2 E3 ubiquitin ligase mediate 'Lys-63'- linked polyubiquitination of TRAF6, a component of IL17A-mediated signaling pathway.

**Cellular Location** Nucleus. Cytoplasm

# **UBE2N Antibody (N-term) Blocking Peptide - Protocols**

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

Blocking Peptides

**UBE2N Antibody (N-term) Blocking Peptide - Images** 

# **UBE2N 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. UBE2N is a member of the E2 ubiquitin-conjugating enzyme family. Studies in mouse suggest that this protein plays a role in DNA postreplication repair.

# **UBE2N Antibody (N-term) Blocking Peptide - References**

Bothos, J., et al., Oncogene 22(46):7101-7107 (2003).McKenna, S., et al., J. Biol. Chem. 278(15):13151-13158 (2003).Hofmann, R.M., et al., Cell 96(5):645-653 (1999).Yamaguchi, T., et al., J. Biochem. 120(3):494-497 (1996).Ashley, C., et al., Gene 285 (1-2), 183-191 (2002).