

UBE2N Blocking Peptide (Center)

Synthetic peptide Catalog # BP21169a

Specification

UBE2N Blocking Peptide (Center) - Product Information

Primary Accession

P61088

UBE2N Blocking Peptide (Center) - 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 is selected from aa 41-54 of HUMAN UBE2N

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 Blocking Peptide (Center) - 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:28469175, PubMed:31006531). 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 Blocking Peptide (Center) - Protocols

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

Blocking Peptides

UBE2N Blocking Peptide (Center) - Images

UBE2N Blocking Peptide (Center) - Background

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 (By similarity).

UBE2N Blocking Peptide (Center) - References

Yamaguchi T.,et al.J. Biochem. 120:494-497(1996). Kalnine N.,et al.Submitted (MAY-2003) to the EMBL/GenBank/DDBJ databases. Lubec G.,et al.Submitted (DEC-2008) to UniProtKB. Zou W.,et al.Biochem. Biophys. Res. Commun. 336:61-68(2005). Hofmann R.M.,et al.Cell 96:645-653(1999).