

Catalog # BP19802a

UBE2K Blocking Peptide(N-term) Synthetic peptide

Specification

UBE2K Blocking Peptide(N-term) - Product Information

Primary Accession Other Accession <u>P61086</u> <u>P61087</u>, <u>P61085</u>, <u>NP_005330.1</u>

UBE2K Blocking Peptide(N-term) - Additional Information

Gene ID 3093

Other Names

Ubiquitin-conjugating enzyme E2 K, Huntingtin-interacting protein 2, HIP-2, Ubiquitin carrier protein, Ubiquitin-conjugating enzyme E2-25 kDa, Ubiquitin-conjugating enzyme E2(25K), Ubiquitin-conjugating enzyme E2-25K, Ubiquitin-protein ligase, UBE2K, HIP2, LIG

Target/Specificity The synthetic peptide sequence is selected from aa 17-30 of HUMAN UBE2K

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.

UBE2K Blocking Peptide(N-term) - Protein Information

Name UBE2K

Synonyms HIP2, LIG

Function

Accepts ubiquitin from the E1 complex and catalyzes its covalent attachment to other proteins. In vitro, in the presence or in the absence of BRCA1-BARD1 E3 ubiquitin-protein ligase complex, catalyzes the synthesis of 'Lys-48'-linked polyubiquitin chains. Does not transfer ubiquitin directly to but elongates monoubiquitinated substrate protein. Mediates the selective degradation of short-lived and abnormal proteins, such as the endoplasmic reticulum-associated degradation (ERAD) of misfolded lumenal proteins. Ubiquitinates huntingtin. May mediate foam cell formation by the suppression of apoptosis of lipid-bearing macrophages through ubiquitination and subsequence degradation of p53/TP53. Proposed to be involved in ubiquitination and proteolytic processing of NF-kappa-B; in vitro supports ubiquitination of NFKB1. In case of infection by cytomegaloviruses may be involved in the US11-dependent degradation of MHC class I heavy



chains following their export from the ER to the cytosol. In case of viral infections may be involved in the HPV E7 protein-dependent degradation of RB1.

Cellular Location

Cytoplasm {ECO:0000250|UniProtKB:P61085}.

Tissue Location

Expressed in all tissues tested, including spleen, thymus, prostate, testis, ovary, small intestine, colon, peripheral blood leukocytes, T-lymphocytes, monocytes, granulocytes and bone marrow mononuclear cells. Highly expressed in brain, with highest levels found in cortex and striatum and at lower levels in cerebellum and brainstem.

UBE2K Blocking Peptide(N-term) - Protocols

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

<u>Blocking Peptides</u>

UBE2K Blocking Peptide(N-term) - Images

UBE2K Blocking Peptide(N-term) - Background

The protein encoded by this gene belongs to the ubiquitin-conjugating enzyme family. This protein interacts with RING finger proteins, and it can ubiquitinate huntingtin, the gene product for Huntington's disease. Known functions for this protein include a role in aggregate formation of expanded polyglutamine proteins and the suppression of apoptosis in polyglutamine diseases, a role in the dislocation of newly synthesized MHC class I heavy chains from the endoplasmic reticulum, and involvement in foam cell formation. Multiple transcript variants encoding different isoforms have been identified for this gene. [provided by RefSeq].

UBE2K Blocking Peptide(N-term) - References

Bae, Y., et al. Biochem. Biophys. Res. Commun. 397(4):718-723(2010) Christensen, D.E., et al. Nat. Struct. Mol. Biol. 14(10):941-948(2007) de Pril, R., et al. Mol. Cell. Neurosci. 34(1):10-19(2007) Flierman, D., et al. Proc. Natl. Acad. Sci. U.S.A. 103(31):11589-11594(2006) Yamada, M., et al. J. Biol. Chem. 281(30):20749-20760(2006)