10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

RBX1 Blocking Peptide (C-term)

Synthetic peptide
Catalog # BP20572a

Specification

RBX1 Blocking Peptide (C-term) - Product Information

Primary Accession	P62877
Other Accession	P62878, Q23457

RBX1 Blocking Peptide (C-term) - Additional Information

Gene ID 9978

Other Names
E3 ubiquitin-protein ligase RBX1, 632-, Protein ZYP, RING finger protein 75, RING-box protein 1, Rbx1, Regulator of cullins 1, E3 ubiquitin-protein ligase RBX1, N-terminally processed, RBX1, RNF75, ROC1

Target/Specificity
The synthetic peptide sequence is selected from aa 94-108 of HUMAN RBX1

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.

RBX1 Blocking Peptide (C-term) - Protein Information

Name RBX1 (HGNC:9928)

Function
E3 ubiquitin ligase component of multiple cullin-RING-based E3 ubiquitin-protein ligase (CRLs) complexes which mediate the ubiquitination and subsequent proteasomal degradation of target proteins, including proteins involved in cell cycle progression, signal transduction, transcription and transcription-coupled nucleotide excision repair (PubMed:10230407, PubMed:10579999, PubMed:15983046, PubMed:16678110, PubMed:19112177, PubMed:19679664, PubMed:23455478, PubMed:27565346, PubMed:<a

href="http://www.uniprot.org/citations/29769719" target="_blank">29769719, PubMed:11961546, PubMed:22748924). CRLs complexes and ARIH1 collaborate in tandem to mediate ubiquitination of target proteins, ARIH1 mediating addition of the first ubiquitin on CRLs targets (PubMed:27565346). The functional specificity of the E3 ubiquitin-protein ligase complexes depends on the variable substrate recognition components. As a component of the CSA complex promotes the ubiquitination of ERCC6 resulting in proteasomal degradation. Recruits the E2 ubiquitin-conjugating enzyme CDC34 to the complex and brings it into close proximity to the substrate. Probably also stimulates CDC34 autoubiquitination. May be required for histone H3 and histone H4 ubiquitination in response to ultraviolet and for subsequent DNA repair. Promotes the neddylation of CUL1, CUL2, CUL4 and CUL4 via its interaction with UBE2M. Involved in the ubiquitination of KEAP1, ENC1 and KLHL41. In concert with ATF2 and CUL3, promotes degradation of KAT5 thereby attenuating its ability to acetylate and activate ATM. As part of a multisubunit complex composed of elongin BC complex (ELOB and ELOC), elongin A/ELOA, RBX1 and CUL5; polyubiquitinates monoubiquitinated POLR2A (PubMed:19920177).

Cellular Location
Cytoplasm. Nucleus

Tissue Location
Widely expressed.

RBX1 Blocking Peptide (C-term) - Protocols

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

- Blocking Peptides

RBX1 Blocking Peptide (C-term) - Images

RBX1 Blocking Peptide (C-term) - Background

E3 ubiquitin ligase component of multiple cullin-RING- based E3 ubiquitin-protein ligase complexes which mediate the ubiquitination and subsequent proteasomal degradation of target proteins, including proteins involved in cell cycle progression, signal transduction, transcription and transcription-coupled nucleotide excision repair. The functional specificity of the E3 ubiquitin-protein ligase complexes depends on the variable substrate recognition components. As a component of the CSA complex promotes the ubiquitination of ERCC6 resulting in proteasomal degradation. Through the RING-type zinc finger, seems to recruit the E2 ubiquitination enzyme, like CDC34, to the complex and brings it into close proximity to the substrate. Probably also stimulates CDC34 autoubiquitination. May be required for histone H3 and histone H4 ubiquitination in response to ultraviolet and for subsequent DNA repair. Promotes the neddylation of CUL1, CUL2, CUL4 and CUL4 via its interaction with UBE2M. Involved in the ubiquitination of KEAP1, ENC1 and KLHL41. In concert with ATF2 and CUL3, promotes degradation of KAT5 thereby attenuating its ability to acetylate and activate ATM.

RBX1 Blocking Peptide (C-term) - References

Ohta T.,et al.Mol. Cell 3:535-541(1999).
Kamura T.,et al.Science 284:657-661(1999).
Collins J.E.,et al.Genome Biol. 5:R84.1-R84.11(2004).
Ota T.,et al.Nat. Genet. 36:40-45(2004).
Dunham I.,et al.Nature 402:489-495(1999).

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