

CDC73 Blocking Peptide (Center)

Synthetic peptide Catalog # BP21710c

Specification

CDC73 Blocking Peptide (Center) - Product Information

Primary Accession

Q6P1I9

CDC73 Blocking Peptide (Center) - Additional Information

Gene ID 79577

Other Names

Parafibromin, Cell division cycle protein 73 homolog, Hyperparathyroidism 2 protein, CDC73, C1orf28, HRPT2

Target/Specificity

The synthetic peptide sequence is selected from aa 147-161 of HUMAN CDC73

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.

CDC73 Blocking Peptide (Center) - Protein Information

Name CDC73

Synonyms Clorf28, HRPT2

Function

Tumor suppressor probably involved in transcriptional and post-transcriptional control pathways. May be involved in cell cycle progression through the regulation of cyclin D1/PRAD1 expression. Component of the PAF1 complex (PAF1C) which has multiple functions during transcription by RNA polymerase II and is implicated in regulation of development and maintenance of embryonic stem cell pluripotency. PAF1C associates with RNA polymerase II through interaction with POLR2A CTD non-phosphorylated and 'Ser-2'- and 'Ser- 5'-phosphorylated forms and is involved in transcriptional elongation, acting both independently and synergistically with TCEA1 and in cooperation with the DSIF complex and HTATSF1. PAF1C is required for transcription of Hox and Wnt target genes. PAF1C is involved in hematopoiesis and stimulates transcriptional activity of KMT2A/MLL1; it promotes leukemogenesis through association with KMT2A/MLL1-rearranged oncoproteins, such as KMT2A/MLL1-MLLT3/AF9 and KMT2A/MLL1-MLLT1/ENL. PAF1C is involved in histone modifications such as ubiquitination of histone H2B and methylation on histone H3 'Lys-4'



(H3K4me3). PAF1C recruits the RNF20/40 E3 ubiquitin-protein ligase complex and the E2 enzyme UBE2A or UBE2B to chromatin which mediate monoubiquitination of 'Lys-120' of histone H2B (H2BK120ub1); UB2A/B-mediated H2B ubiquitination is proposed to be coupled to transcription. PAF1C is involved in mRNA 3' end formation probably through association with cleavage and poly(A) factors. In case of infection by influenza A strain H3N2, PAF1C associates with viral NS1 protein, thereby regulating gene transcription. Connects PAF1C with the cleavage and polyadenylation specificity factor (CPSF) complex and the cleavage stimulation factor (CSTF) complex, and with Wnt signaling. Involved in polyadenylation of mRNA precursors.

Cellular Location Nucleus

Tissue Location

Found in adrenal and parathyroid glands, kidney and heart.

CDC73 Blocking Peptide (Center) - Protocols

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

Blocking Peptides

CDC73 Blocking Peptide (Center) - Images

CDC73 Blocking Peptide (Center) - Background

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CDC73 Blocking Peptide (Center) - References

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Gregory S.G.,et al.Nature 441:315-321(2006).
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