

CLP1 Antibody (C-term) Blocking Peptide

Synthetic peptide Catalog # BP17136b

Specification

CLP1 Antibody (C-term) Blocking Peptide - Product Information

Primary Accession

Q92989

CLP1 Antibody (C-term) Blocking Peptide - Additional Information

Gene ID 10978

Other Names

 $\label{lem:polyribonucleotide 5'-hydroxyl-kinase Clp1 {ECO:0000255|HAMAP-Rule:MF_03035}, 27178 {ECO:0000255|HAMAP-Rule:MF_03035}, Polyadenylation factor Clp1 {ECO:0000255|HAMAP-Rule:MF_03035}, Polynucleotide kinase Clp1 {ECO:0000255|HAMAP-Rule:MF_03035}, Pre-mRNA cleavage complex II protein Clp1 {ECO:0000255|HAMAP-Rule:MF_03035}, CLP1 {ECO:0000255|HAMAP-Rule:MF_03035}, HEAB$

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.

CLP1 Antibody (C-term) Blocking Peptide - Protein Information

Name CLP1 {ECO:0000255|HAMAP-Rule:MF_03035}

Synonyms HEAB

Function

Polynucleotide kinase that can phosphorylate the 5'-hydroxyl groups of double-stranded RNA (dsRNA), single-stranded RNA (ssRNA), double-stranded DNA (dsDNA) and double-stranded DNA:RNA hybrids. dsRNA is phosphorylated more efficiently than dsDNA, and the RNA component of a DNA:RNA hybrid is phosphorylated more efficiently than the DNA component. Plays a key role in both tRNA splicing and mRNA 3'-end formation. Component of the tRNA splicing endonuclease complex: phosphorylates the 5'-terminus of the tRNA 3'-exon during tRNA splicing; this phosphorylation event is a prerequisite for the subsequent ligation of the two exon halves and the production of a mature tRNA (PubMed:24766809, PubMed:24766810). Its role in tRNA splicing and maturation is required for cerebellar development (PubMed:24766809, PubMed:24766809, PubMed:<a href="http://www.uniprot.org/citations/24766810"



target="_blank">24766810). Component of the pre-mRNA cleavage complex II (CF-II), which seems to be required for mRNA 3'-end formation. Also phosphorylates the 5'-terminus of exogenously introduced short interfering RNAs (siRNAs), which is a necessary prerequisite for their incorporation into the RNA-induced silencing complex (RISC). However, endogenous siRNAs and microRNAs (miRNAs) that are produced by the cleavage of dsRNA precursors by DICER1 already contain a 5'-phosphate group, so this protein may be dispensible for normal RNA-mediated gene silencing.

Cellular Location

Nucleus {ECO:0000255|HAMAP-Rule:MF_03035, ECO:0000269|PubMed:11060040, ECO:0000269|PubMed:24766810}

CLP1 Antibody (C-term) Blocking Peptide - Protocols

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

Blocking Peptides

CLP1 Antibody (C-term) Blocking Peptide - Images

CLP1 Antibody (C-term) Blocking Peptide - Background

Polynucleotide kinase that can phosphorylate the 5'-hydroxyl groups of double-stranded RNA (dsRNA), single-stranded RNA (ssRNA), double stranded DNA (dsDNA) and double-stranded DNA:RNA hybrids. dsRNA is phosphorylated more efficiently than dsDNA, and the RNA component of a DNA:RNA hybrid is phosphorylated more efficiently than the DNA component. Appears to have roles in both tRNA splicing and mRNA 3'-end formation. Component of the tRNA splicing endonuclease complex. Phosphorylates the 5'-terminus of the tRNA 3'-exon during tRNA splicing; this phosphorylation event is a prerequisite for the subsequent ligation of the two exon halves and the production of a mature tRNA. Component of the pre-mRNA cleavage complex II (CF-II), which seems to be required for mRNA 3'-end formation. Also phosphorylates the 5'-terminus of exogenously introduced short interfering RNAs (siRNAs), which is a necessary prerequisite for their incorporation into the RNA-induced silencing complex (RISC). However endogenous siRNAs and microRNAs (miRNAs) that are produced by the cleavage of dsRNA precursors by DICER1 already contain a 5'-phosphate group, so this protein may be dispensible for normal RNA-mediated gene silencing.

CLP1 Antibody (C-term) Blocking Peptide - References

Ramirez, A., et al. RNA 14(9):1737-1745(2008)Weitzer, S., et al. Nature 447(7141):222-226(2007)Paushkin, S.V., et al. Cell 117(3):311-321(2004)Zhou, Z., et al. Nature 419(6903):182-185(2002)de Vries, H., et al. EMBO J. 19(21):5895-5904(2000)