

CLP1 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP17136b

Specification

CLP1 Antibody (C-term) - Product Information

Application Primary Accession Other Accession

Reactivity Predicted Host Clonality Isotype Calculated MW Antigen Region WB,E <u>O92989</u> <u>O5POL4, O99LI9, O4R7R3, O5ZJL4, A2VE01,</u> <u>NP_006822.1, NP_001136069.1</u> Human Bovine, Chicken, Monkey, Mouse, Rat Rabbit Polyclonal Rabbit IgG 47646 308-336

CLP1 Antibody (C-term) - Additional Information

Gene ID 10978

Other Names

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

Target/Specificity

This CLP1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 308-336 amino acids from the C-terminal region of human CLP1.

Dilution WB~~1:1000

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

CLP1 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

CLP1 Antibody (C-term) - 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: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.

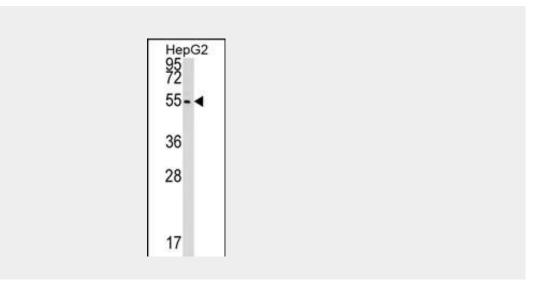
Cellular Location Nucleus {ECO:0000255|HAMAP-Rule:MF_03035, ECO:0000269|PubMed:11060040, ECO:0000269|PubMed:24766810}

CLP1 Antibody (C-term) - Protocols

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

- <u>Western Blot</u>
- <u>Blocking Peptides</u>
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

CLP1 Antibody (C-term) - Images





CLP1 Antibody (C-term) (Cat. #AP17136b) western blot analysis in HepG2 cell line lysates (35ug/lane).This demonstrates the CLP1 antibody detected the CLP1 protein (arrow).

CLP1 Antibody (C-term) - 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) - 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)