

CLP1 antibody - N-terminal region

Rabbit Polyclonal Antibody

Catalog # AI15077

Product Information

Application	WB
Primary Accession	Q92989
Other Accession	NM_001142597 , NP_001136069
Reactivity	Human, Mouse, Rat, Rabbit, Zebrafish, Pig, Dog, Guinea Pig, Horse, Bovine
Predicted	Human, Mouse, Rat, Rabbit, Zebrafish, Pig, Dog, Guinea Pig, Horse, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	47646

Additional Information

Gene ID	10978
Alias Symbol	HEAB, hClp1
Other Names	Polyribonucleotide 5'-hydroxyl-kinase Clp1 {ECO:0000255 HAMAP-Rule:MF_03035}, 2.7.1.78 {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	Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose.
Reconstitution & Storage	Add 50 ul of distilled water. Final anti-CLP1 antibody concentration is 1 mg/ml in PBS buffer with 2% sucrose. For longer periods of storage, store at 20°C. Avoid repeat freeze-thaw cycles.
Precautions	CLP1 antibody - N-terminal region is for research use only and not for use in diagnostic or therapeutic procedures.

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.

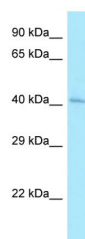
Cellular Location

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

References

Tanabe S.,et al.Blood 88:3535-3545(1996).
Ota T.,et al.Nat. Genet. 36:40-45(2004).
Mural R.J.,et al.Submitted (JUL-2005) to the EMBL/GenBank/DDBJ databases.
de Vries H.,et al.EMBO J. 19:5895-5904(2000).
Paushkin S.V.,et al.Cell 117:311-321(2004).

Images



Host: Rabbit
Target Name: CLP1
Antibody Dilution: 1.0µg/ml
Sample Tissue: HepG2 cell lysate
CLP1 is supported by BioGPS gene expression data to be expressed in HepG2

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.