

# HEAB Antibody

Rabbit mAb

Catalog # AP92751

## Product Information

<b>Application</b>	WB, IHC, FC
<b>Primary Accession</b>	<a href="#">Q92989</a>
<b>Reactivity</b>	Human
<b>Clonality</b>	Monoclonal
<b>Other Names</b>	clp1; hClp1;
<b>Isotype</b>	Rabbit IgG
<b>Host</b>	Rabbit
<b>Calculated MW</b>	47646

## Additional Information

<b>Dilution</b>	WB 1:500~1:2000 IHC 1:50~1:200 FC 1:50
<b>Purification</b>	Affinity-chromatography
<b>Immunogen</b>	A synthesized peptide derived from human HEAB
<b>Description</b>	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.
<b>Storage Condition and Buffer</b>	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.

## Protein Information

<b>Name</b>	CLP1 {ECO:0000255   HAMAP-Rule:MF_03035}
<b>Synonyms</b>	HEAB
<b>Function</b>	<p>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:<a href="#">24766809</a>, PubMed:<a href="#">24766810</a>). Its role in tRNA splicing and maturation is required for cerebellar development (PubMed:<a href="#">24766809</a>, PubMed:<a href="#">24766810</a>). 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</p>

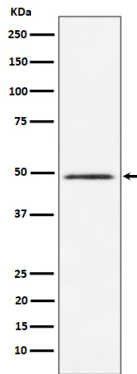
short interfering RNAs (siRNAs), which is a necessary prerequisite for their incorporation into the RNA-induced silencing complex (RISC). However, endogenous siRNAs and microRNAs (miRNAs) that are produced by the cleavage of dsRNA precursors by DICER1 already contain a 5'-phosphate group, so this protein may be dispensable for normal RNA-mediated gene silencing.

#### Cellular Location

Nucleus {ECO:0000255 | HAMAP-Rule:MF\_03035,  
ECO:0000269 | PubMed:11060040, ECO:0000269 | PubMed:24766810}

## Images

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Western blot analysis of HEAB expression in HeLa cell lysate.

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