

HEAB Antibody

Rabbit mAb Catalog # AP92751

Specification

clp1; hClp1;

HEAB Antibody - Product Information

Application WB, IHC, FC
Primary Accession O92989
Clonality Monoclonal
Other Names

Isotype Rabbit IgG
Host Rabbit
Calculated MW 47646 Da

HEAB Antibody - Additional Information

Dilution WB~~1:1000

IHC~~1:100~500 FC~~1:10~50

Purification Affinity-chromatography

Immunogen A synthesized peptide derived from human

HEAB

Description 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.

Storage Condition and Buffer 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.

HEAB Antibody - 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: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

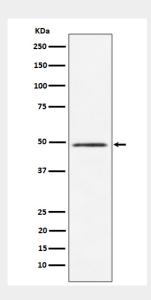
Nucleus {ECO:0000255|HAMAP-Rule:MF_03035, ECO:0000269|PubMed:11060040, ECO:0000269|PubMed:24766810}

HEAB Antibody - Protocols

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

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

HEAB Antibody - Images



Western blot analysis of HEAB expression in HeLa cell lysate.