

HELB antibody - N-terminal region

Rabbit Polyclonal Antibody Catalog # Al10992

Specification

HELB antibody - N-terminal region - Product Information

Application WB

Primary Accession Q8NG08

Other Accession
Reactivity
NM_033647, NP_387467
Human, Rat, Pig, Bovine

Predicted Human, Pig
Host Rabbit
Clonality Polyclonal
Calculated MW 120kDa KDa

HELB antibody - N-terminal region - Additional Information

Gene ID 92797

Alias Symbol hDHB

Other Names

DNA helicase B, hDHB, 3.6.4.12, HELB

Format

Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose.

Reconstitution & Storage

Add 100 ul of distilled water. Final anti-HELB 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

HELB antibody - N-terminal region is for research use only and not for use in diagnostic or therapeutic procedures.

HELB antibody - N-terminal region - Protein Information

Name HELB (HGNC:17196)

Function

5'-3' DNA helicase involved in DNA damage response by acting as an inhibitor of DNA end resection (PubMed:<a href="http://www.uniprot.org/citations/25617833"

target="_blank">25617833, PubMed:26774285). Recruitment to single-stranded DNA (ssDNA) following DNA damage leads to inhibit the nucleases catalyzing resection, such as EXO1, BLM and DNA2, possibly via the 5'-3' ssDNA translocase activity of HELB (PubMed:26774285). As cells approach S phase, DNA end resection is promoted by the nuclear export of HELB following phosphorylation (PubMed:<a href="http://www.uniprot.org/citations/26774285"



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target=" blank">26774285). Acts independently of TP53BP1 (PubMed:26774285). Unwinds duplex DNA with 5'-3' polarity. Has single-strand DNA-dependent ATPase and DNA helicase activities. Prefers ATP and dATP as substrates (PubMed:12181327). During S phase, may facilitate cellular recovery from replication stress (PubMed:22194613).

Cellular Location

Nucleus. Cytoplasm. Chromosome. Note=Predominantly nuclear (PubMed:15146062). Phosphorylation at Ser-967 by CDK2 during the G1/S transition results in its nuclear export into the cytoplasm as cells approach and progress through S phase (PubMed:15146062). Following DNA damage, recruited to sites of double-strand breaks by the RPA complex (PubMed:26774285). Recruited to chromatin following DNA damage induced by UV irradiation, or camptothecin or hydroxyurea treatment (PubMed:22194613).

Tissue Location

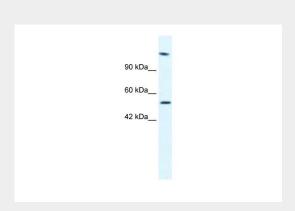
Highly expressed in testis and thymus and weakly in liver, spleen, kidney and brain.

HELB antibody - N-terminal region - Protocols

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

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

HELB antibody - N-terminal region - Images



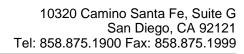
WB Suggested Anti-HELB Antibody Titration: 2.5µg/ml

ELISA Titer: 1:62500

Positive Control: Jurkat cell lysate

HELB antibody - N-terminal region - References

Taneja, P., et al., (2002) J. Biol. Chem. 277 (43), 40853-40861Reconstitution and Storage: For short term use, store at 2-8C up to f 1 week. For long term storage, store at -20C in small aliquots to





prevent freeze-thaw cycles.