

**HELB antibody - N-terminal region**  
**Rabbit Polyclonal Antibody**  
**Catalog # AI10992****Specification**

---

**HELB antibody - N-terminal region - Product Information**

Application	WB
Primary Accession	<a href="#">Q8NG08</a>
Other Accession	<a href="#">NM_033647</a> , <a href="#">NP_387467</a>
Reactivity	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
<b>Other Names</b>	
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: [25617833](http://www.uniprot.org/citations/25617833), PubMed: [26774285](http://www.uniprot.org/citations/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](http://www.uniprot.org/citations/26774285)). As cells approach S phase, DNA end resection is promoted by the nuclear export of HELB following phosphorylation (PubMed: [26774285](http://www.uniprot.org/citations/26774285))

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

#### 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

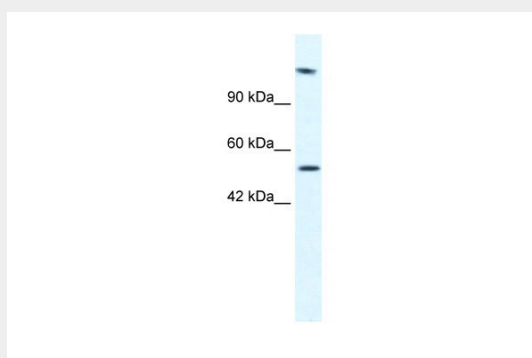
Highly expressed in testis and thymus and weakly in liver, spleen, kidney and brain.

#### 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](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [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), 40853-40861  
Reconstitution and Storage:For short term use, store at 2-8C up to 1 week. For long term storage, store at -20C in small aliquots to

prevent freeze-thaw cycles.