

HELB antibody - N-terminal region

Rabbit Polyclonal Antibody

Catalog # AI10992

Product Information

Application	WB
Primary Accession	Q8NG08
Other Accession	NM_033647 , NP_387467
Reactivity	Human, Rat, Pig, Bovine
Predicted	Human, Pig
Host	Rabbit
Clonality	Polyclonal
Calculated MW	123252

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.

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 , 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: 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).

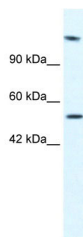
Tissue Location

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

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.

Images



WB Suggested Anti-HELB Antibody Titration: 2.5µg/ml
ELISA Titer: 1:62500
Positive Control: Jurkat cell lysate

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