



HELB Mouse mAb

Catalog No	YP-mAb-19046
Isotype	IgG
Reactivity	Human;Mouse;Rat
Applications	WB
Gene Name	HELB
Immunogen	Synthesized peptide derived from human HELB
Specificity	This antibody detects endogenous levels of HELB at Human, Mouse
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Monoclonal,Mouse,IgG
Purification	The antibody was affinity-purified from mouse antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	WB 1:500-2000
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	hDHB;EC:3.6.4.12;HELB;DNA helicase B (hDHB) (EC 3.6.4.12)
Observed Band	120-140 kDa
Calculated Molecular Weight	1087 aa, 123 kDa
Cell Pathway	Nucleus . Cytoplasm . Chromosome . 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 Specificity	Highly expressed in testis and thymus and weakly in liver, spleen, kidney and brain.
Function	5'-3' DNA helicase involved in DNA damage response by acting as an inhibitor of DNA end resection . 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 . As cells approach S phase, DNA end resection is promoted by the nuclear export of HELB following phosphorylation . Acts independently of TP53BP1 . Unwinds



duplex DNA with 5'-3' polarity. Has single-strand DNA-dependent ATPase and DNA helicase activities. Prefers ATP and dATP as substrates . During S phase, may facilitate cellular recovery from replication stress .

Background

matters needing attention

Avoid repeated freezing and thawing!

Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

Products Images