

Anti-DCLRE1B Antibody

Catalog # AP59867

Product Information

Application	WB
Primary Accession	Q9H816
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	60002

Additional Information

Gene ID	64858
Other Names	SNM1B; 5' exonuclease Apollo; DNA cross-link repair 1B protein; SNM1 homolog B; SNMIB; hSNM1B
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the C-term region of human DCLRE1B. The exact sequence is proprietary.
Dilution	WB~~WB (1/500 - 1/1000)
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

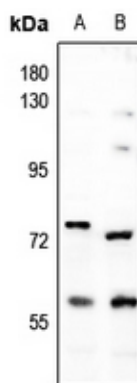
Name	DCLRE1B
Synonyms	SNM1B
Function	5'-3' exonuclease that plays a central role in telomere maintenance and protection during S-phase. Participates in the protection of telomeres against non-homologous end-joining (NHEJ)- mediated repair, thereby ensuring that telomeres do not fuse. Plays a key role in telomeric loop (T loop) formation by being recruited by TERF2 at the leading end telomeres and by processing leading-end telomeres immediately after their replication via its exonuclease activity: generates 3' single-stranded overhang at the leading end telomeres avoiding blunt leading-end telomeres that are vulnerable to end-joining reactions and expose the telomere end in a manner that activates the DNA repair pathways. Together with TERF2, required to protect telomeres from replicative damage during replication by controlling the amount of DNA topoisomerase (TOP1, TOP2A and TOP2B) needed for telomere replication during fork passage and prevent aberrant telomere topology. Also involved in

response to DNA damage: plays a role in response to DNA interstrand cross-links (ICLs) by facilitating double-strand break formation. In case of spindle stress, involved in prophase checkpoint. Possesses beta-lactamase activity, catalyzing the hydrolysis of penicillin G and nitrocefin (PubMed:[31434986](#)). Exhibits no activity towards other beta-lactam antibiotic classes including cephalosporins (cefotaxime) and carbapenems (imipenem) (PubMed:[31434986](#)).

Cellular Location

Chromosome, telomere. Nucleus. Cytoplasm, cytoskeleton, microtubule organizing center, centrosome. Note=Mainly localizes to telomeres, recruited via its interaction with TERF2 During mitosis, localizes to the centrosome

Images



Western blot analysis of DCLRE1B expression in A549 (A), CT26 (B) whole cell lysates. (Predicted band size: 60 kD; Observed band size: 60; 75 kD)

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