

Anti-DCLRE1B Antibody

Rabbit polyclonal antibody to DCLRE1B Catalog # AP59867

Specification

Anti-DCLRE1B Antibody - Product Information

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

Anti-DCLRE1B Antibody - Additional Information

Gene ID 64858

Other Names SNM1B; 5' exonuclease Apollo; DNA cross-link repair 1B protein; SNM1 homolog B; SNMIB; hSNM1B

Target/Specificity Recognizes endogenous levels of DCLRE1B protein.

Dilution WB~~WB (1/500 - 1/1000)

Format Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.09% (W/V) sodium azide.

Storage Store at -20 °C.Stable for 12 months from date of receipt

Anti-DCLRE1B Antibody - 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

Anti-DCLRE1B Antibody - Protocols

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

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

Anti-DCLRE1B Antibody - Images



Western blot analysis of DCLRE1B expression in A549 (A), CT26 (B) whole cell lysates.

Anti-DCLRE1B Antibody - Background

KLH-conjugated synthetic peptide encompassing a sequence within the C-term region of human DCLRE1B. The exact sequence is proprietary.