

BLM Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP4860b

Specification

BLM Antibody (C-term) - Product Information

WB, FC, E Application **Primary Accession** P54132 Reactivity Human **Rabbit** Host Clonality **Polyclonal** Isotype Rabbit IgG 159000 Calculated MW Antigen Region 1054-1082

BLM Antibody (C-term) - Additional Information

Gene ID 641

Other Names

Bloom syndrome protein, DNA helicase, RecQ-like type 2, RecQ2, RecQ protein-like 3, BLM, RECQ2, RECQL3

Target/Specificity

This BLM antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 1054-1082 amino acids from the C-terminal region of human BLM.

Dilution

WB~~1:1000 FC~~1:10~50

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

BLM Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

BLM Antibody (C-term) - Protein Information

Name BLM

Synonyms RECQ2, RECQL3



Function ATP-dependent DNA helicase that unwinds single- and double- stranded DNA in a 3'-5' direction (PubMed:9388193, PubMed:24816114, PubMed:25901030). Participates in DNA replication and repair (PubMed:12019152, PubMed:21325134, PubMed:23509288, PubMed:34606619). Involved in 5'-end resection of DNA during double-strand break (DSB) repair: unwinds DNA and recruits DNA2 which mediates the cleavage of 5'-ssDNA (PubMed:21325134). Negatively regulates sister chromatid exchange (SCE) (PubMed:25901030). Stimulates DNA 4-way junction branch migration and DNA Holliday junction dissolution (PubMed:25901030). Binds single-stranded DNA (ssDNA), forked duplex DNA and DNA Holliday junction (PubMed:20639533, PubMed:24257077, PubMed:25901030). Recruited by the KHDC3L-OOEP scaffold to DNA replication forks where it is retained by TRIM25 ubiquitination, it thereby promotes the restart of stalled replication forks (By similarity).

Cellular Location

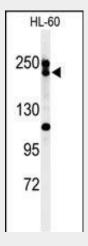
Nucleus. Note=Together with SPIDR, is redistributed in discrete nuclear DNA damage-induced foci following hydroxyurea (HU) or camptothecin (CPT) treatment. Accumulated at sites of DNA damage in a RMI complex- and SPIDR-dependent manner

BLM Antibody (C-term) - Protocols

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

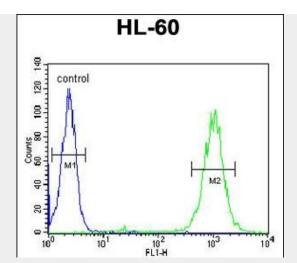
- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

BLM Antibody (C-term) - Images



Western blot analysis of BLM Antibody (C-term) (Cat. #AP4860b) in HL-60 cell line lysates (35ug/lane). BLM (arrow) was detected using the purified Pab.





BLM Antibody (C-term) (Cat. #AP4860b) flow cytometric analysis of HL-60 cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

BLM Antibody (C-term) - Background

BLM is related to the RecQ subset of DExH box-containing DNA helicases and has both DNA-stimulated ATPase and ATP-dependent DNA helicase activities.

BLM Antibody (C-term) - References

Davila, S., et al. Genes Immun. 11(3):232-238(2010) Frank, B., et al. Carcinogenesis 31(3):442-445(2010) Ouyang, K.J., et al. PLoS Biol. 7 (12), E1000252 (2009)