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Anti-BLM pT122 (RABBIT) Antibody

BLM phospho T122 Antibody
Catalog # ASR5705

Specification

Anti-BLM pT122 (RABBIT) Antibody - Product Information

Host	**Rabbit**
Conjugate	**Unconjugated**
Target Species	**Human**
Reactivity	**Human**
Clonality	**Polyclonal**
Application	**WB, IHC, E, I, LCI**
Application Note	**Anti-BLM pT122 antibody is useful for ELISA, Immunohistochemistry, and Western Blot. Specific conditions for reactivity should be optimized by the end user. Expect a band approximately ~159kDa corresponding to the appropriate cell lysate or extract.**
Physical State	**Liquid (sterile filtered)**
Buffer	**0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2**
Immunogen	**Anti-BLM pT122 affinity purified antibody was prepared from whole rabbit serum produced by repeated immunizations with a synthetic peptide corresponding to the internal region of human Bloom syndrome protein.**
Stabilizer	**50% (v/v) Glycerol**

Anti-BLM pT122 (RABBIT) Antibody - Additional Information

Gene ID 641

Purity
Anti-BLM pT122 was affinity purified from monospecific antiserum by immunoaffinity chromatography. A BLAST analysis was used to suggest cross-reactivity with human based on 100% sequence homology. Cross-reactivity with BLM pT122 from other sources has not been determined.

Storage Condition
Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.

Precautions Note
This product is for research use only and is not intended for therapeutic or diagnostic applications.

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Anti-BLM pT122 (RABBIT) Antibody - Protein Information

Name BLM

Synonyms RECQ2, RECQL3

Function
ATP-dependent DNA helicase that unwinds double-stranded (ds)DNA in a 3'-5' direction (PubMed:24816114, PubMed:25901030, PubMed:9388193, PubMed:9765292). 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). Stimulates DNA 4-way junction branch migration and DNA Holliday junction dissolution (PubMed:25901030). Binds single-stranded DNA (ssDNA), forked duplex DNA and Holliday junction DNA (PubMed:20639533, PubMed:24257077, PubMed:25901030). Unwinds G-quadruplex DNA; unwinding occurs in the 3'- 5' direction and requires a 3' single-stranded end of at least 7 nucleotides (PubMed:18426915, PubMed:9765292). Helicase activity is higher on G-quadruplex substrates than on duplex DNA substrates (PubMed:9765292). Telomeres, immunoglobulin heavy chain switch regions and rDNA are notably G-rich; formation of G-quadruplex DNA would block DNA replication and transcription (PubMed:18426915, PubMed:9765292). Negatively regulates sister chromatid exchange (SCE) (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

Anti-BLM pT122 (RABBIT) Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation

- Flow Cytomety
- Cell Culture

Anti-BLM pT122 (RABBIT) Antibody - Images

Anti-BLM pT122 (RABBIT) Antibody - Background

BLM pT122 product is a member of the RecQ helicase protein family. The protein contains 1417 amino acids; including one ATP binding site, one DEAH box, and two putative nuclear localization signals, as well as phosphorylation sites. BLS protein is known to associate and be phosphorylated by the ATR (ataxia telangiectasia, rad3+) protein, in response to genetic stress. The Bloom's syndrome gene product is thought to play a role in the etiology of two major human health problems, each of which is a very common complication of Bloom's syndrome, namely cancer and diabetes. Anti-BLM pT122 antibody is ideal for researchers interested in Epigenetics and Nuclear Signaling or DNA Damage & Repair research.