abcam

Product datasheet

Anti-Blooms Syndrome Protein Blm antibody ab476

2 Abreviews 31 References 2 Images

Overview

Product name	Anti-Blooms Syndrome Protein Blm antibody
Description	Rabbit polyclonal to Blooms Syndrome Protein Blm
Host species	Rabbit
Tested applications	**Suitable for:** WB, IP
Species reactivity	**Reacts with:** Human **Predicted to work with:** Mammals
Immunogen	Fusion protein (His-tag) corresponding to Human Blooms Syndrome Protein Blm (C terminal). His-tagged 376 amino acid C-terminal of human blm fusion protein.
Positive control	HeLa nuclear extract.
General notes	The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing. If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle.
Storage buffer	Preservative: 0.05% Sodium azide
Purity	Whole antiserum
Clonality	Polyclonal
Isotype	IgG

Applications

The Abpromise guarantee	Our Abpromise guarantee covers the use of ab476 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		1/2000. Detects a band of approximately 170 kDa (predicted molecular weight: 159 kDa). We have conflicting reports from customers about whether this antibody works in IF in HeLa or SK-N-SH cells. We would appreciate any customer feedback about this antibody.
IP		Use at an assay dependent concentration.

Target

Function
Participates in DNA replication and repair. Exhibits a magnesium-dependent ATP-dependent DNA-helicase activity that unwinds single- and double-stranded DNA in a 3'-5' direction.

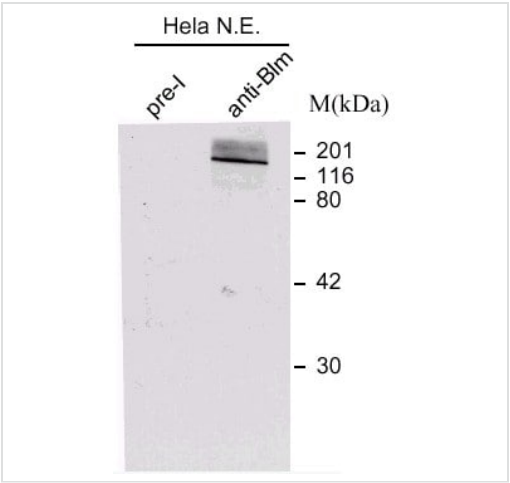
Involvement in disease
Defects in BLM are the cause of Bloom syndrome (BLM) [MIM:210900]. BLM is an autosomal recessive disorder characterized by proportionate pre- and postnatal growth deficiency, sun-sensitive telangiectatic hypo- and hyperpigmented skin, predisposition to malignancy, and chromosomal instability.

Sequence similarities
Belongs to the helicase family. RecQ subfamily.
Contains 1 helicase ATP-binding domain.
Contains 1 helicase C-terminal domain.
Contains 1 HRDC domain.

Post-translational modifications
Phosphorylated in response to DNA damage. Phosphorylation requires the FANCA-FANCC-FANCE-FANCF-FANCG protein complex, as well as the presence of RMI1.

Cellular localization
Nucleus.

Images



Western blot - Anti-Blooms Syndrome Protein Blm antibody (ab476)

Western blot using ab476 against HELA nuclear extract revealing the 160kD Blm protein which, in gels, moves as a 190kD band.

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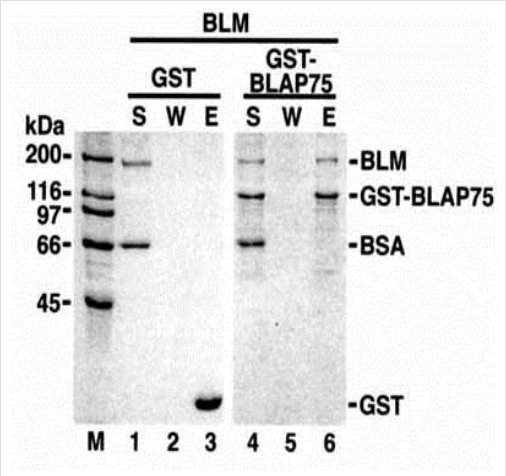

Immunoprecipitation - Anti-Blooms Syndrome Protein Blm antibody (ab476)

Image from S Raynard et al, J Biol Chem 281:13861-4 (2006), Fig 2.

BLAP75 physically interacts with BLM and Topo IIIa. Purified BLM was incubated with purified Topo IIIa and the reaction mixture was subjected to Immunoprecipitation with ab476. The reaction supernatant (S), wash (W), and eluate (E) were analyzed by SDS-PAGE, GST-BLAP75 or GST alone was incubated with BLM. Protein complexes were captured on glutathione-Sepharose beads, followed by SDS-PAGE.

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