abcam

Product datasheet

Anti-Shugoshin antibody [3C11] ab58023

★★★★★ 6 Abreviews 17 References 2 图像

概述

产**品名称** Anti-Shugoshin抗体[3C11]

描述 小鼠单克隆抗体[3C11] to Shugoshin

宿主 Mouse

经测试应用 适用于: WB, Flow Cyt

种属反应性 与反应: Human, Recombinant fragment

免疫原 Recombinant full length protein, corresponding to amino acids 1-293 of Human Shugoshin

常规说明 This product was changed from ascites to tissue culture supernatant on 17/04/2019. Please note

that the dilutions may need to be adjusted accordingly. If you have any questions, please do not

hesitate to contact our scientific support team.

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

性能

形式 Liquid

存放说明 Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw

cycles.

存储溶液 pH: 7.4

纯**度** Tissue culture supernatant

同种型 lgG2a

轻链类型 kappa

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The Abpromise guarantee

Abpromise™承诺保证使用ab58023于以下的经测试应用

"应用说明"部分 下显示的仅为推荐的起始稀释度:实际最佳的稀释度/浓度应由使用者检定。

应用	Ab评论	说明
WB	* * * * * <u>(2)</u>	Use at an assay dependent concentration. This antibody has only been tested in WB against the recombinant fragment used as immunogen. We have no data on the detection of endogenous protein.
Flow Cyt		Use at an assay dependent concentration. <u>ab170191</u> - Mouse monoclonal lgG2a, is suitable for use as an isotype control with this antibody.

靶标

功能

Plays a central role in chromosome cohesion during mitosis by preventing premature dissociation of cohesin complex from centromeres after prophase, when most of cohesin complex dissociates from chromosomes arms. May act by preventing phosphorylation of the STAG2 subunit of cohesin complex at the centromere, ensuring cohesin persistence at centromere until cohesin cleavage by ESPL1/separase at anaphase. Essential for proper chromosome segregation during mitosis and this function requires interaction with PPP2R1A. Its phosphorylated form is necessary for chromosome congression and for the proper attachment of spindle microtubule to the kinetochore. Necessary for kinetochore localization of PLK1 and CENPF. May play a role in the tension sensing mechanism of the spindle-assembly checkpoint by regulating PLK1 kinetochore affinity. Isoform 3 plays a role in maintaining centriole cohesion involved in controlling spindle pole integrity.

组织特异性

placenta. Strongly overexpressed in 90% of breast cancers tested.

Widely expressed. Highly expressed in testis. Expressed in lung, small intestine, breast, liver and

序列相似性

Belongs to the shugoshin family.

发展阶段

Appears in prophase cells and remains present until metaphase. Strongly decreases at the onset of anaphase and completely disapears at telophase. Not present in interphase cells (at protein level).

结构域

The KEN box and D-box 3 are required for its ubiquitination and degradation.

翻译后修饰

Ubiquitinated and degraded during mitotic exit by APC/C-Cdh1.

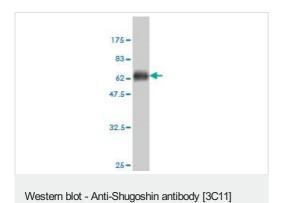
细胞定位

Phosphorylation by NEK2 is essential for chromosome congression in mitosis and for the proper attachment of spindle microtubule to the kinetochore. Phosphorylated by PLK1 and AUKRB.

Nucleus. Chromosome > centromere. Chromosome > centromere > kinetochore. Cytoplasm > cytoskeleton > spindle pole. Cytoplasm > cytoskeleton > centrosome. Localizes to the inner centromere throughout prophase until metaphase and disappears at anaphase. During prometaphase, it localizes to a single focus, while at metaphase, it localizes to 2 spots corresponding to the 2 centromeres. Centromeric localization requires the presence of BUB1 and the interaction with PPP2R1A. Localizes to the inner kinetochore from prophase to early metaphase. Co-localizes with NEK2 and SS18L1 at the kinetochore. Phosphorylation by AUKRB and the presence of BUB1 are required for localization to the kinetochore. Isoform 1 primarily localizes to kinetochores during G2 phase and mitotic prophase, metaphase, and anaphase and does not appear to be associated with kinetochores during late mitosis. Isoform 3 is found at the

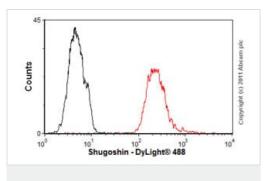
图片

(ab58023)



Western blot against tagged recombinant protein immunogen using ab58023 Shugoshin antibody at 1ug/ml. Predicted band size of immunogen is 58 kDa.

This image was generated using the ascites version of the product.



Flow Cytometry - Anti-Shugoshin antibody [3C11] (ab58023)

Overlay histogram showing MCF-7 cells stained with ab58023 (red line). The cells were fixed with 80% methanol (5 min) and then permeabilized with 0.1% PBS-Tween for 20 min. The cells were then incubated in 1x PBS / 10% normal goat serum / 0.3M glycine to block non-specific protein-protein interactions followed by the antibody (ab58023, 0.5µg/1x10⁶ cells) for 30 min at 22°C. The secondary antibody used was DyLight® 488 goat anti-mouse lgG (H+L) (ab96879) at 1/500 dilution for 30 min at 22°C. Isotype control antibody (black line) was mouse lgG2a [ICIGG2A] (ab91361, 1µg/1x10⁶ cells) used under the same conditions. Acquisition of >5,000 events was performed. This antibody gave a positive signal in MCF-7 cells fixed with 4% paraformaldehyde (10 min)/permeabilized with 0.1% PBS-Tween for 20 min used under the same conditions.

This image was generated using the ascites version of the product.

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