

Anti-PLK1 antibody [AZ44] ab12212

★★★★★ [1 Abreviews](#) [2 References](#) [画像数 1](#)

製品の概要

製品名	Anti-PLK1 antibody [AZ44]
製品の詳細	Mouse monoclonal [AZ44] to PLK1
由来種	Mouse
特異性	This is a useful antibody to check that extracts have maintained their CSF status and haven't been activated into interphase.
アプリケーション	適用あり: WB
種交差性	交差種: Human, <i>Xenopus laevis</i> 非交差種: Mouse
免疫原	Recombinant full length protein (<i>Xenopus laevis</i>).
エピトープ	This antibody is thought to bind to a phosphorylated epitope. However, this has not yet been proved, but it does stain in a mitotic specific manner.
特記事項	<p>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.</p> <p>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</p>

製品の特性

製品の状態	Liquid
保存方法	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.
バッファー	Preservative: 0.02% Sodium azide Constituent: 99.98% PBS
精製度	Protein A purified
ポリ/モノ	モノクローナル
クローン名	AZ44
ミエローマ	Sp2/0-Ag14

アプリケーション

The Abpromise guarantee **Abpromise保証は、次のテスト済みアプリケーションにおけるab12212の使用に適用されます**

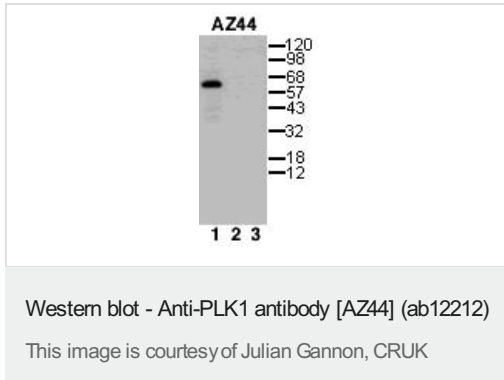
アプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

アプリケーション	Abreviews	特記事項
WB	★★★★★ (1)	Use a concentration of 1 µg/ml. Detects a band of approximately 65 kDa (predicted molecular weight: 68 kDa).

ターゲット情報

機能	Serine/threonine-protein kinase that performs several important functions throughout M phase of the cell cycle, including the regulation of centrosome maturation and spindle assembly, the removal of cohesins from chromosome arms, the inactivation of APC/C inhibitors, and the regulation of mitotic exit and cytokinesis. Required for recovery after DNA damage checkpoint and entry into mitosis. Required for kinetochore localization of BUB1B. Phosphorylates SGOL1. Required for spindle pole localization of isoform 3 of SGOL1 and plays a role in regulating its centriole cohesion function. Phosphorylates BORA, and thereby promotes the degradation of BORA. Contributes to the regulation of AURKA function. Regulates TP53 stability through phosphorylation of TOPORS.
組織特異性	Placenta and colon.
配列類似性	Belongs to the protein kinase superfamily. Ser/Thr protein kinase family. CDC5/Polo subfamily. Contains 2 POLO box domains. Contains 1 protein kinase domain.
発生段階	Accumulates to a maximum during the G2 and M phases, declines to a nearly undetectable level following mitosis and throughout G1 phase, and then begins to accumulate again during S phase.
翻訳後修飾	Catalytic activity is enhanced by phosphorylation of Thr-210. Phosphorylation at Thr-210 is first detected on centrosomes in the G2 phase of the cell cycle, peaks in prometaphase and gradually disappears from centrosomes during anaphase. Autophosphorylation and phosphorylation of Ser-137 may not be significant for the activation of PLK1 during mitosis, but may enhance catalytic activity during recovery after DNA damage checkpoint. Ubiquitinated by the anaphase promoting complex/cyclosome (APC/C) in anaphase and following DNA damage, leading to its degradation by the proteasome. Ubiquitination is mediated via its interaction with FZR1/CDH1. Ubiquitination and subsequent degradation prevents entry into mitosis and is essential to maintain an efficient G2 DNA damage checkpoint.
細胞内局在	Nucleus. Chromosome > centromere > kinetochore. Cytoplasm > cytoskeleton > centrosome. During early stages of mitosis, the phosphorylated form is detected on centrosomes and kinetochores. Localizes to the outer kinetochore. Presence of SGOL1 and interaction with the phosphorylated form of BUB1 is required for the kinetochore localization.

画像



Western blot using ab12212.

Lane 1: Mitotic CSF Xenopus egg extract

Lane 2: Interphase Xenopus egg extract

Lane 3: HeLa cell extract

AZ44 only blots the Xenopus mitotic form of Plx which we assume to be due to this antibody recognizing a phosphorylated epitope.

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