# abcam

# Product datasheet

# Anti-ABL1 antibody [EPR23406-32] - BSA and Azide free ab272701



リコンピナント

RabMAb

#### 画像数 4

#### 製品の概要

製品名 Anti-ABL1 antibody [EPR23406-32] - BSA and Azide free

製品の詳細 Rabbit monoclonal [EPR23406-32] to ABL1 - BSA and Azide free

由来種 Rabbit

アプリケーション 適用あり: Flow Cyt (Intra), WB

適用なし: Flow Cyt,ICC/IF,IHC-P or IP

種交差性 交差種: Human

非交差種: Mouse. Rat

免疫原 Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.

ポジティブ・コントロール WB: Wild-type HeLa, K-562, MCF7, HeLa and Daudi whole cell lysate. Flow Cyt (intra): K-562

cells.

特記事項 ab272701 is the carrier-free version of ab254341.

Our <u>carrier-free</u> antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for increased conjugation efficiency.

This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.

Use our <u>conjugation kits</u> for antibody conjugates that are ready-to-use in as little as 20 minutes with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.

This product is compatible with the Maxpar<sup>®</sup> Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar<sup>®</sup> is a trademark of Fluidigm Canada Inc.

This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility
- Improved sensitivity and specificity
- Long-term security of supply
- Animal-free production

For more information see here.

Our RabMAb® technology is a patented hybridoma-based technology for making rabbit

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### 製品の特性

製品の状態 Liquid

保存方法 Shipped at 4°C. Store at +4°C. Do Not Freeze.

**バッファー** pH: 7.2

Constituent: PBS

キャリア・フリー はい

精製度 Protein A purified

**ポリ/モノ** モノクローナル **クローン名** EPR23406-32

アイソタイプ IgG

#### アプリケーション

**The Abpromise guarantee** <u>Abpromise保証は、</u>次のテスト済みアプリケーションにおけるab272701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
Flow Cyt (Intra)		Use at an assay dependent concentration.
WB		Use at an assay dependent concentration. Predicted molecular weight: 122 kDa.

追加情報 Is unsuitable for Flow Cyt,ICC/IF,IHC-P or IP.

#### ターゲット情報

機能 Protein kinase that regulates key processes linked to cell growth and survival. Regulates cytoskeleton remodeling during cell differentiation, cell division and cell adhesion. Localizes to

dynamic actin structures, and phosphorylates CRK and CRKL, DOK1, and other proteins controlling cytoskeleton dynamics. Regulates DNA repair potentially by activating the proapoptotic

pathway when the DNA damage is too severe to be repaired. Phosphorylates PSMA7 that leads

to an inhibition of proteasomal activity and cell cycle transition blocks.

組織特異性 Widely expressed.

関連疾患 Note=A chromosomal aberration involving ABL1 is a cause of chronic myeloid leukemia.

Translocation t(9;22)(q34;q11) with BCR. The translocation produces a BCR-ABL found also in

acute myeloid leukemia (AML) and acute lymphoblastic leukemia (ALL).

配列類似性 Belongs to the protein kinase superfamily. Tyr protein kinase family. ABL subfamily.

Contains 1 protein kinase domain.

Contains 1 SH2 domain. Contains 1 SH3 domain.

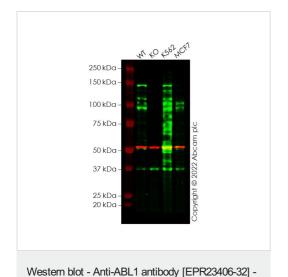
翻訳後修飾 Phosphorylated by PRKDC (By similarity). DNA damage-induced activation of c-Abl requires the

function of ATM and Ser-446 phosphorylation (By similarity). Phosphorylation on Thr-735 is required for binding 14-3-3 proteins for cytoplasmic translocation. Isoform IB is myristoylated on Gly-2.

#### 細胞内局在

Cytoplasm > cytoskeleton. Nucleus. Sequestered into the cytoplasm through interaction with 14-3-3 proteins and Nucleus membrane. The myristoylated c-ABL protein is reported to be nuclear.

#### 画像



BSA and Azide free (ab272701)

All lanes: Anti-ABL1 antibody [EPR23406-32] (ab254341) at 1/1000 dilution

Lane 1: Wild-type HeLa cell lysate

Lane 2: ABL1 knockout HeLa cell lysate

Lane 3 : K562 cell lysate

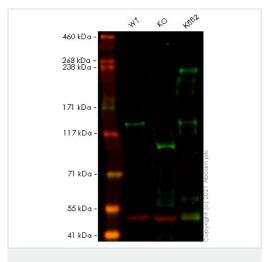
Lane 4 : MCF7 cell lysate

Lysates/proteins at 20 µg per lane.

Performed under reducing conditions.

Predicted band size: 122 kDa Observed band size: 123 kDa

False colour image of Western blot: Anti-ABL1 antibody [EPR23406-32] staining at 1/1000 dilution, shown in green; Mouse anti-Alpha Tubulin [DM1A] (ab7291) loading control staining at 1/20000 dilution, shown in red. In Western blot, ab254341 was shown to bind specifically to ABL1. A band was observed at 123 kDa in wild-type HeLa cell lysates with no signal observed at this size in ABL1 knockout cell line ab277152 (knockout cell lysate ab277194). To generate this image, wild-type and ABL1 knockout HeLa cell lysates were analysed. First, samples were run on an SDS-PAGE gel then transferred onto a nitrocellulose membrane. Membranes were blocked in 5 % milk in TBS-0.1 % Tween<sup>®</sup> 20 (TBS-T) before incubation with primary antibodies overnight at 4 °C. Blots were washed four times in TBS-T, incubated with secondary antibodies for 1 h at room temperature, washed again four times then imaged. Secondary antibodies used were Goat anti-Rabbit IgG H&L 800CW and Goat anti-Mouse IgG H&L 680RD at 1/20000 dilution.



Western blot - Anti-ABL1 antibody [EPR23406-32] - BSA and Azide free (ab272701)

**All lanes :** Anti-ABL1 antibody [EPR23406-32] (**ab254341**) at 1/1000 dilution

Lane 1: Wild-type HeLa cell lysate

Lane 2: ABL1 knockout HeLa cell lysate

Lane 3: K562 cell lysate

Lysates/proteins at 20 µg per lane.

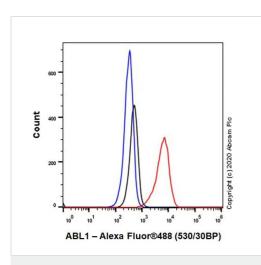
Performed under reducing conditions.

**Predicted band size:** 122 kDa **Observed band size:** 130 kDa

This data was developed using the same antibody clone in a different buffer formulation (<u>ab254341</u>).

**Lanes 1 - 3:** Merged signal (red and green). Green - <u>ab254341</u> observed at 130 kDa. Red - loading control, <u>ab7291</u> (Mouse anti-Alpha Tubulin [DM1A]) observed at 55 kDa.

ab254341 was shown to react with ABL1 in wild-type HeLa cells in western blot. The bands observed in ABL1 knockout cell line ab265612 (ABL1 knockout cell lysate ab263077) below 130 kDa may represent truncated forms and cleaved fragments. This has not been investigated further. HeLa wild-type and ABL1 knockout cell lysates were subjected to SDS-PAGE. Membranes were blocked in 3% milk in TBS-T (0.1 % Tween®) before incubation with ab254341 and ab7291 (Mouse anti-Alpha Tubulin [DM1A]) overnight at 4°C at a 1:1000 dilution and a 1:20000 dilution respectively. Blots were incubated with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preabsorbed (ab216773) and Goat anti-Mouse IgG H&L (IRDye® 680RD) preabsorbed (ab216776) secondary antibodies at 1:20000 dilution for 1 h at room temperature before imaging.



Flow Cytometry (Intracellular) - Anti-ABL1 antibody [EPR23406-32] - BSA and Azide free (ab272701)

Intracellular flow cytometric analysis of 4% paraformaldehyde-fixed, 90% methanol-permeabilized K-562 (Human chronic myelogenous leukemia lymphoblast) cells labelling ABL1 with <u>ab254341</u> at 1/500 dilution (0.1µg) (Red) compared with a Rabbit monoclonal IgG (<u>ab172730</u>) (Black) isotype control and an unlabelled control (cells without incubation with primary antibody and secondary antibody) (Blue). A Goat anti rabbit IgG (Alexa Fluor<sup>®</sup> 488, <u>ab150077</u>) at 1/2000 dilution was used as the secondary antibody.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab254341).



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