# abcam

## Product datasheet

## Anti-Src antibody [EPR5496] ab109381



★★★★★ 2 Abreviews 35 References 画像数 6

#### 製品の概要

免疫原

製品名 Anti-Src antibody [EPR5496]

製品の詳細 Rabbit monoclonal [EPR5496] to Src

由来種 Rabbit

アプリケーション 適用あり: WB, IHC-P

適用なし: Flow Cyt or IP

種交差性 交差種: Human

交差が予測される動物種: Mouse, Rat 4

Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.

ポジティブ・コントロール WB: Hela, 293T, SH-SY5Y and HUVEC cell lysates. IHC-P: Human kidney and colonic

adenocarcinoma tissues.

特記事項 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 monoclonal antibodies. For details on our patents, please refer to **RabMAb**® **patents**.

## 製品の特性

製品の状態

保存方法 Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C.

バッファー pH: 7.20

Preservative: 0.05% Sodium azide

Constituents: 0.1% BSA, 40% Glycerol (glycerin, glycerine), 9.85% Tris glycine, 50% Tissue

culture supernatant

精製度 Tissue culture supernatant

ポリモノ モノクローナル

クローン名

EPR5496

アイソタイプ

lgG

#### 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ab109381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	<b>★★★★★ (2)</b>	1/10000 - 1/50000. Predicted molecular weight: 60 kDa.
IHC-P		1/250 - 1/500. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

追加情報

Is unsuitable for Flow Cyt or IP.

#### ターゲット情報

#### 機能

Non-receptor protein tyrosine kinase that plays pivotal roles in numerous cellular processes such as proliferation, migration, and transformation. In concert with PTK2B, plays an important role in osteoclastic bone resorption. Both the formation of a SRC-PTK2B complex, and SRC kinase activity are necessary for this function. Once it is recruited to the activated integrins, by PTK2B, it phosphorylates CBL which in turn induces the activation and recruitment of phosphatidylinositol 3-kinase to the cell membrane in a signaling pathway that is critical for osteoclast function. Promotes energy production in osteoclasts by activating mitochondrial cytochrome C oxidase. Phosphorylates RUNX3 and COX2 on tyrosine residues, TNK2 on 'Tyr-284' and CBL on 'Tyr-731'. Enhances DDX58/RIG-l-elicited antiviral signaling.

## 配列類似性

Belongs to the protein kinase superfamily. Tyr protein kinase family. SRC subfamily.

Contains 1 protein kinase domain.

Contains 1 SH2 domain. Contains 1 SH3 domain.

## 翻訳後修飾

Dephosphorylated at Tyr-530 by PTPRJ (By similarity). Phosphorylated on Tyr-530 by c-Src kinase (CSK). The phosphorylated form is termed pp60c-src. Dephosphorylated by PTPRJ at Tyr-419. Normally maintained in an inactive conformation with the SH2 domain engaged with Tyr-530, the SH3 domain engaged with the SH2-kinase linker, and Tyr-419 dephosphorylated. Dephosphorylation of Tyr-530 as a result of protein tyrosine phosphatase (PTP) action disrupts the intramolecular interaction between the SH2 domain and Tyr-530, Tyr-419 can then become autophosphorylated, resulting in SRC activation. Phosphorylation of Tyr-530 by CSK allows this interaction to reform, resulting in SRC inactivation.

S-nitrosylation is important for activation of its kinase activity.

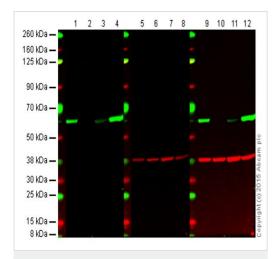
## 細胞内局在

Cell membrane. Mitochondrion inner membrane.

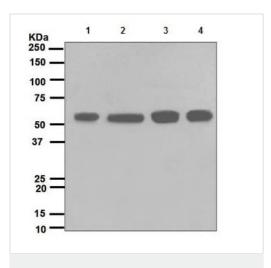
## 製品の状態

This protein is known to be similar in amino acid sequence to HCK (P08631), LCK (P06239), FYN (P06241), YES1 (P07947), and LYN (P07948). Therefore, cross-reactivity with these homologous proteins may be observed. We would be happy to provide immunogen alignment information upon request.

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Western blot - Anti-Src antibody [EPR5496] (ab109381)



Western blot - Anti-Src antibody [EPR5496] (ab109381)

Lanes 1, 5 and 9: Wild-type HAP1 cell lysate (20  $\mu$ g)

Lanes 2, 6 and 10: Src knockout HAP1 cell lysate (20 µg)

Lanes 3, 7 and 11: HeLa cell lysate (20  $\mu g)$ 

Lanes 4, 8 and 12: A431 cell lysate (20 µg)

Lanes 1, 2, 3 and 4: Green signal from target – ab109381

observed at 60 kDa

**Lanes 5, 6, 7 and 8:** Red signal from loading control –  $\underline{ab8245}$ 

observed at 37 kDa

Lanes 9, 10, 11 and 12: Merged (red and green) signal

ab109381 was shown to specifically react with Src when Src knockout samples were used. Wild-type and Src knockout samples were subjected to SDS-PAGE. ab109381 and <u>ab8245</u> (loading control to GAPDH) were diluted 1/10 000 and 1/2000 respectively and incubated overnight at 4°C. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preadsorbed (<u>ab216773</u>) and Goat anti-Mouse IgG H&L (IRDye® 680RD) preadsorbed (<u>ab216776</u>) secondary antibodies at 1/10 000 dilution for 1 h at room temperature before imaging.

**All lanes :** Anti-Src antibody [EPR5496] (ab109381) at 1/10000 dilution

Lane 1: Hela cell lysate

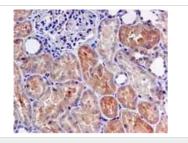
Lane 2: 293T cell lysate

Lane 3: SH-SY5Y cell lysate

Lane 4: HUVEC cell lysate

Lysates/proteins at 10 µg per lane.

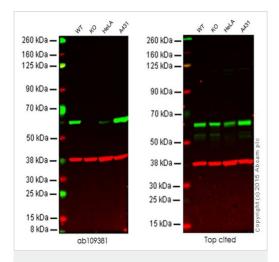
Predicted band size: 60 kDa



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Src antibody [EPR5496] (ab109381)

ab109381, at 1/250 dilution, staining Src in paraffin-embedded Human kidney tissue by Immunohistochemistry.

Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



Western blot - Anti-Src antibody [EPR5496] (ab109381)

Lane 1: Wild-type HAP1 cell lysate (20 µg)

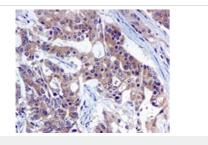
Lane 2: Src knockout HAP1 cell lysate (20 µg)

Lane 3: HeLa cell lysate (20 µg)

Lane 4: A431 cell lysate (20 µg)

**Lanes 1 - 4:** Merged signal (red and green). Green - ab109381 observed at 60 kDa. Red - loading control, <u>ab8245</u>, observed at 37 kDa.

This western blot image is a comparison between ab109381 and a competitor's top cited rabbit polyclonal antibody.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Src antibody [EPR5496] (ab109381)

ab109381, at 1/250 dilution, staining Src in paraffin-embedded Human colonic adenocarcinoma tissue by Immunohistochemistry.

Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



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