abcam

Product datasheet

Anti-Src antibody [EGTR103] ab133283



ייבעדיו RabMAb

6 References 画像数9

製品の概要

製品名 Anti-Src antibody [EGTR103]

製品の詳細 Rabbit monoclonal [EGTR103] to Src

由来種 Rabbit

アプリケーション 適用あり: IHC-P, WB

種交差性 交差種: Mouse, Rat, Human

免疫原 Synthetic peptide corresponding to Human Src aa 350-450.

Database link: P12931

ポジティブ・コントロール IHC-P: Rat and Mouse colon tissues. Human liver tissue. WB: HAP1, A431, U87-MG, and SH-

5YSY cell lysates. Mouse and rat brain lysate. Mouse hippocampus lysate

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 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 long

term. Avoid freeze / thaw cycle.

バッファー pH: 7.2

Preservative: 0.01% Sodium azide

Constituents: 59% PBS, 40% Glycerol (glycerin, glycerine), 0.5% BSA

精製度 Protein A purified

ポリ/モノ モノクローナル クローン名 EGTR103

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ab133283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
IHC-P		1/50. See IHC antigen retrieval protocols .
WB		1/1000. Predicted molecular weight: 60 kDa. For unpurified use at 1/1000 - 1/10000.

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.

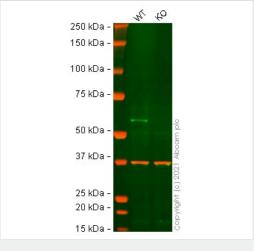
細胞内局在

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.

画像



Western blot - Anti-Src antibody [EGTR103] (ab133283)

All lanes : Anti-Src antibody [EGTR103] (ab133283) at 1/1000 dilution

Lane 1: Wild-type HAP1 cell lysate

Lane 2: SRC knockout HAP1 cell lysate

Lysates/proteins at 20 µg per lane.

Performed under reducing conditions.

Predicted band size: 60 kDa **Observed band size:** 65 kDa

False colour image of Western blot: Anti-Src antibody [EGTR103] staining at 1/1000 dilution, shown in green; Mouse anti-GAPDH antibody [6C5] (ab8245) loading control staining at 1/20000 dilution, shown in red. In Western blot, ab133283 was shown to bind specifically to Src. A band was observed at 65 kDa in wild-type HAP1 cell lysates with no signal observed at this size in SRC knockout cell line HAP1. To generate this image, wild-type and SRC knockout HAP1 cell lysates were analysed. First, samples were run on an SDS-PAGE gel then transferred onto a nitrocellulose membrane. Membranes were blocked in fluorescent western blot (TBS-based) blocking solution 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 lgG H&L (IRDye® 800CW) preabsorbed (ab216773) and Goat anti-Mouse IgG H&L (IRDye® 680RD) preabsorbed (ab216776) at 1/20000 dilution.



Western blot - Anti-Src antibody [EGTR103] (ab133283)

Lanes 1-3: Anti-Src antibody [EGTR103] (ab133283) at 1/1000 dilution (Purified)

Lane 4: Purified at 1/1000 dilution

Lane 1 : SH-SY5Y (Human neuroblastoma epithelial cell) whole cell

Lane 2 : Mouse brain lysate

Lane 3: Rat brain lysate

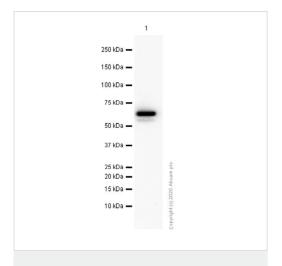
Lane 4: Mouse hippocampus lysate

Lysates/proteins at 20 µg per lane.

Secondary

All lanes : Goat Anti-Rabbit IgG H&L (HRP) (<u>ab97051</u>) at 1/20000 dilution

Predicted band size: 60 kDa Observed band size: 60 kDa



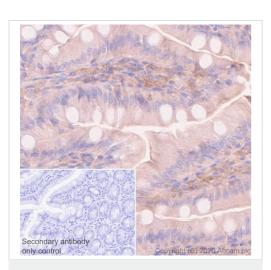
Western blot - Anti-Src antibody [EGTR103] (ab133283)

Anti-Src antibody [EGTR103] (ab133283) at 1/2000 dilution + U-87 MG (Human glioblastoma-astrocytoma epithelial cell) whole cell lysate at 15 μ g

Secondary

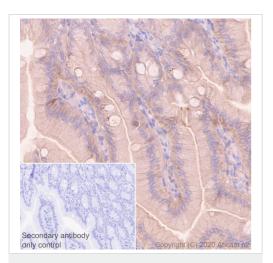
Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/20000 dilution (Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated)

Predicted band size: 60 kDa **Observed band size:** 60 kDa



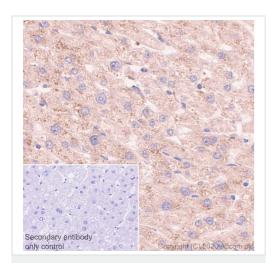
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Src antibody [EGTR103] (ab133283)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of rat colon tissue sections labeling Src with purified ab133283 at 1/50 dilution (6.98 µg/mL). Perform heat mediated antigen retrieval using <u>ab93684</u> (Tris/EDTA buffer, pH 9.0). ImmunoHistoProbe one step HRP Polymer (ready to use) was used as the secondary antibody. Negative control: PBS instead of the primary antibody. Hematoxylin was used as a counterstain.



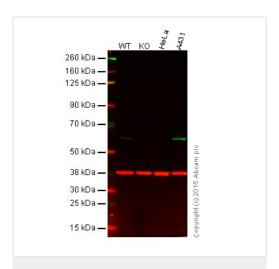
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Src antibody [EGTR103] (ab133283)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of mouse colon tissue sections labeling Src with purified ab133283 at 1/50 dilution (6.98 μ g/mL). Perform heat mediated antigen retrieval using **ab93684** (Tris/EDTA buffer, pH 9.0). ImmunoHistoProbe one step HRP Polymer (ready to use) was used as the secondary antibody. Negative control: PBS instead of the primary antibody. Hematoxylin was used as a counterstain.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Src antibody [EGTR103] (ab133283)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human liver tissue sections labeling Src with purified ab133283 at 1/50 dilution (6.98 µg/mL). Perform heat mediated antigen retrieval using ab93684 (Tris/EDTA buffer, pH 9.0). ImmunoHistoProbe one step HRP Polymer (ready to use) was used as the secondary antibody. Negative control: PBS instead of the primary antibody. Hematoxylin was used as a counterstain.



Western blot - Anti-Src antibody [EGTR103] (ab133283)

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

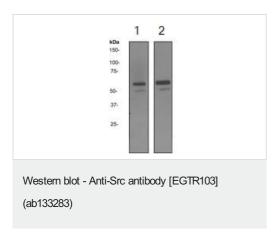
Lane 2: Src knockout HAP1 cell lysate (20 µg)

Lane 3: HeLa cell lysate (20 µg)

Lane 4: A431 knockout HAP1 cell lysate (20 µg)

Lanes 1 - 4: Merged signal (red and green). Green - ab133283 observed at 60 kDa. Red - loading control, <u>ab8226</u>, observed at 42 kDa.

Unpurified ab133283 was shown to specifically react with Src when Src knockout samples were used. Wild-type and Src knockout samples were subjected to SDS-PAGE. ab133283 and <u>ab8226</u> (loading control to beta actin) were both diluted 1/1000 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 1/10000 dilution for 1 h at room temperature before imaging.



All lanes : Anti-Src antibody [EGTR103] (ab133283) at 1/1000 dilution (Unpurified)

Lane 1: U87-MG cell lysate
Lane 2: SH-5YSY cell lysate

Secondary

All lanes: HRP labelled goat anti-rabbit at 1/2000 dilution

Predicted band size: 60 kDa



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