abcam

Product datasheet

Anti-Src (phospho Y529) antibody [Y232] ab32078

יעלאעבע RabMAb

★★★★★ 2 Abreviews 16 References 画像数6

製品の概要

製品名 Anti-Src (phospho Y529) antibody [Y232]

製品の詳細 Rabbit monoclonal [Y232] to Src (phospho Y529)

由来種 Rabbit

特異性 This antibody will detect Src phosphorylation on Tyrosine 529 of both isoforms. The antibody

> immunogen shares 93% homology with Fyn and Yes and 85% homology with Fgr. Therefore, it is likely that the antibody will cross-react with these proteins. However, this is just based on BLAST results and no experiments were performed. The sequence numbering is based off the mature

form of the protein without the initiator methionine.

アプリケーション 適用あり: WB, Dot blot, ICC/IF

適用なし: Flow Cyt or IHC

種交差性 交差種: Human

交差が予測される動物種: Mouse, Rat 🔷

免疫原 Synthetic peptide within Human Src (phospho Y529). The exact sequence is proprietary. The

sequence numbering is based off the mature form of the protein without the initiator methionine.

(Peptide available as ab179556)

ポジティブ・コントロール WB: HeLa and A431 cell lysates ICC/IF: HeLa and A431 cells

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. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.

バッファー pH: 7.20

Preservative: 0.01% Sodium azide

Constituents: 49% PBS, 50% Glycerol (glycerin, glycerine), 0.05% BSA

精製度 Protein A purified

ポリ/モノ モノクローナル

ウローン名 Y232 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ab32078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	★★★★★ (2)	1/5000 - 1/10000. Predicted molecular weight: 60 kDa.
Dot blot		1/2000.
ICC/IF		1/50 - 1/500.

追加情報

Is unsuitable for Flow Cyt or IHC.

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.

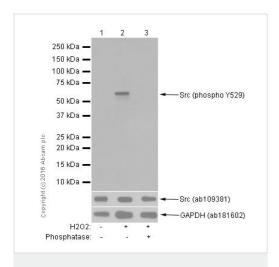
細胞内局在

Cell membrane. Mitochondrion inner membrane.

製品の状態

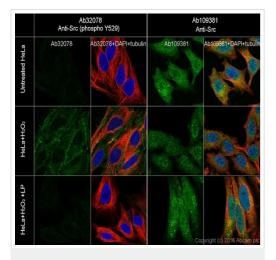
This protein is known to be similar in amino acid sequence to HCK (P08631), LCK (P06239), FYN (P06241), YES1 (P07947), and LYN (P07948). Therefore, cross-reactivity with these homologous proteins may be observed. We would be happy to provide immunogen alignment information upon request.

画像



Western blot - Anti-Src (phospho Y529) antibody [Y232] (ab32078)

WB analysis. Lane 1:Untreated HeLa (Human epithelial cell line from cervix adenocarcinoma) whole cell lysates 15ug and Lane 2:HeLa (Human epithelial cell line from cervix adenocarcinoma) treated with $\rm H_2O_2$ at 10mM for 1 h. whole cell lysates 15ug and Lane 3:HeLa (Human epithelial cell line from cervix adenocarcinoma) treated with $\rm H_2O_2$ at 10mM for 1 h. whole cell lysates 15ug. Then the membrane was incubated with phosphatase. Primary ab used at 1:30,000 dilution. 5% NFDM/TBST was used as Blocking buffer and Diluting buffer. Goat Anti-Rabbit lgG, (H+L), Peroxidase conjugated (ab97051) was used as a Secondary ab at 1:20,000 dilution. The Exposure time was 30 seconds.



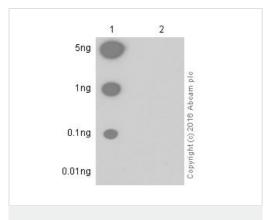
Immunocytochemistry/ Immunofluorescence - Anti-Src (phospho Y529) antibody [Y232] (ab32078)

Immunocytochemistry/Immunofluorescence analysis of HeLa (Human epithelial cell line from cervix adenocarcinoma) cells labelling Src (phospho Y529) with ab32078 at 1/500. Cells were fixed with 4% Paraformaldehyde and permeabilized with 0.1% Triton X-100. ab150077, Alexa Fluor[®] 488-conjugated goat antirabbit IgG (1/1000) was used as the secondary antibody. Cells were counter-stained with ab195889 Anti-Alpha Tubulin antibody [DM1A] (1/200) - Microtubule Marker (Alexa Fluor[®] 594). DAPI (blue) was used as a nuclear counterstain.

The green staining was increased in the H2O2 (10mM, 1 hour) treated HeLa cells when compared with HeLa cells without treatment. After LP treatment, the green signaling was obviously decreased.

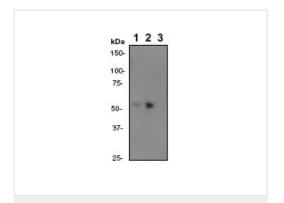
For the pan antibody, there was no great difference after H_2O_2 (10 mM, 1 hour) or EGF (100 ng/mL, 10 minutes) + LP treatment.

The data showed mostly Cytoplasm and Membran staining for Ab32078.



Dot Blot - Anti-Src (phospho Y529) antibody [Y232] (ab32078)

Dot Blot analysis of Lane 1: Src (pY529) phospho peptide and Lane 2: Src non-phospho peptide labeling Src (phospho Y529) with ab32078 at 1/1000 dilution. 5% NFDM/TBST was used as the diluting and blocking buffer. ab97051 Goat Anti-Rabbit lgG, (H+L), Peroxidase conjugated was used as the secondary antibody at 1/100000 dilution. Exposure time: 3 minutes.



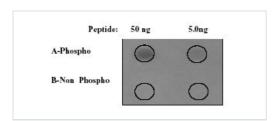
Western blot - Anti-Src (phospho Y529) antibody [Y232] (ab32078)

All lanes : Anti-Src (phospho Y529) antibody [Y232] (ab32078) at 1/10000 dilution

Lane 1: Untreated A431 cells
Lane 2: EGF treated A431 cells

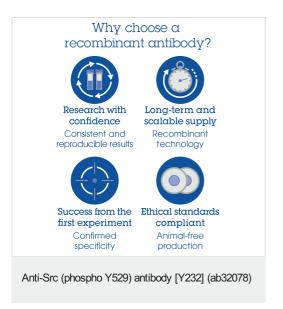
Lane 3: EGF and alkaline phosphatase treated A431 cells

Predicted band size: 60 kDa **Observed band size:** 55 kDa



Dot Blot - Anti-Src (phospho Y529) antibody [Y232] (ab32078)

Dot Blot analysis on immunogen phospho peptide (A) and non phospho peptide (B) using 1/2000 ab32078.



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