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Product datasheet

Anti-Src antibody [GD11] ab231081

KO 評価済

4 References 画像数 3

製品の概要

製品名	Anti-Src antibody [GD11]
製品の詳細	Mouse monoclonal [GD11] to Src
由来種	Mouse
アプリケーション	**適用あり:** IHC-P, ICC/IF, WB
種交差性	**交差種:** Mouse, Rat, Human
免疫原	Recombinant fragment corresponding to Chicken Src.
エピトープ	The GD11 monoclonal binds to amino acid residues 82 to 169 of the Src protein (PubMed ID: 6205164).
ポジティブ・コントロール	WB: HAP1, A431, Mouse testes and Rat testis tissue lysates. ICC/IF: HAP1 wildtype and HAP1-SRC knockout cells. IHC-P: FFPE human testis tissue sections.
特記事項	This antibody clone is manufactured by Abcam. If you require a custom buffer formulation or conjugation for your experiments, please contact **orders@abcam.com**. 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. 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

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	Preservative: 0.02% Sodium azide Constituent: PBS
精製度	Protein G purified
ポリ/モノ	モノクローナル

クローン名	GD11
アイソタイプ	IgG1
軽鎖の種類	kappa

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ab231081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。

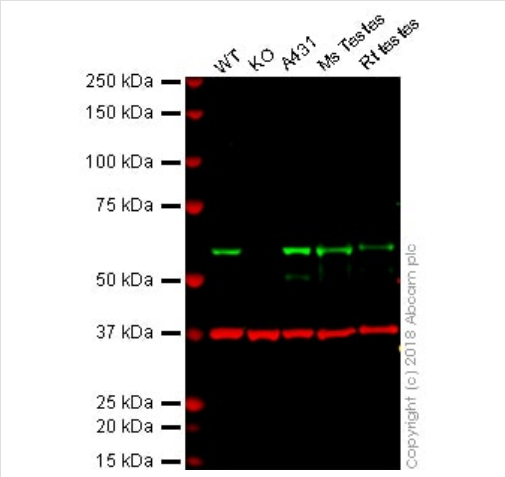
アプリケーション	Abreviews	特記事項
IHC-P		Use at an assay dependent concentration. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.
ICC/IF		Use a concentration of 5 µg/ml.
WB		Use a concentration of 1 µg/ml. Predicted molecular weight: 60 kDa.

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-I-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 [GD11] (ab231081)

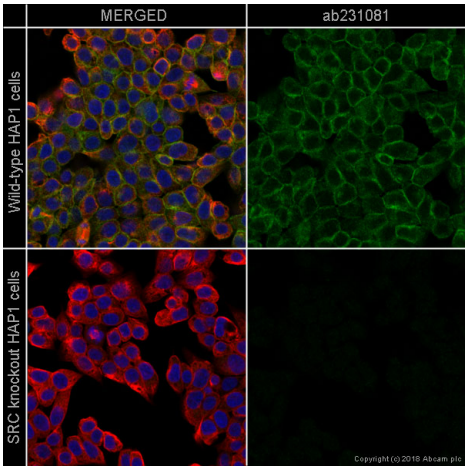
All lanes :

Lane 1 : HAP1 whole cell lysate
Lane 2 : HAP1 Src KO whole cell lysate
Lane 3 : A431 whole cell lysate
Lane 4 : Mouse testes whole tissue lysate
Lane 5 : Rat testes whole tissue lysate

Lysates/proteins at 20 µg per lane.

Predicted band size: 60 kDa

ab231081 was shown to specifically react with Src in wild type HAP1 cells. No band was observed when Src knockout samples were used. Wild-type and Src knockout samples were subjected to SDS-PAGE. ab231081 and **ab181602** (Rabbit anti-GAPDH loading control) were incubated overnight at 4°C at a 1ug/ml concentration and 1/10000 dilution respectively. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preadsorbed (**ab216773**) and Goat anti-Mouse IgG H&L (IRDye® 680RD) preadsorbed (**ab216776**) secondary antibodies at 1/20000 dilution for 1 hour at room temperature before imaging.

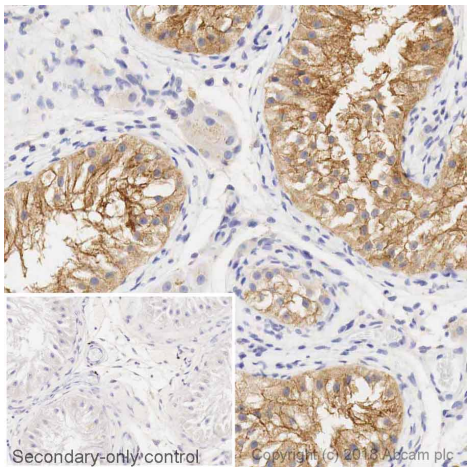


Immunocytochemistry/ Immunofluorescence - Anti-Src antibody [GD11] (ab231081)

ab231081 staining Src in wild-type HAP1 cells (top panel) and SRC knockout HAP1 cells (bottom panel). The cells were fixed with 4% formaldehyde (10min), permeabilized with 0.1% Triton X-100 for 5 minutes and then blocked with 1% BSA/10% normal goat serum/0.3M glycine in 0.1% PBS-Tween for 1h. The cells were then incubated with ab231081 at 5µg/ml and **ab6046** (Rabbit polyclonal to beta tubulin - loading control) at 1/1000 dilution overnight at +4°C, followed by a further incubation at room temperature for 1h with **ab150117** (Goat secondary antibody to Mouse IgG (Alexa Fluor® 488) at 2 µg/ml (colored green) and **ab150084** (Goat secondary antibody to Rabbit IgG (Alexa Fluor® 594) at 2 µg/ml (pseudo color red). Nuclear DNA was labelled in blue with DAPI.

Image was taken with a confocal microscope (Leica-Microsystems,

TCS SP8).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Src antibody [GD11] (ab231081)

IHC image of Src staining in a section of formalin-fixed paraffin-embedded human normal testis* performed on a Leica BOND™ system using the standard protocol F. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH6, epitope retrieval solution 1) for 20mins. The section was then incubated with ab231081, 1ug/ml, for 15 mins at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX. The inset secondary-only control image is taken from an identical assay without primary antibody.

For other IHC staining systems (automated and non-automated) customers should optimize variable parameters such as antigen retrieval conditions, primary antibody concentration and antibody incubation times.

**Tissue obtained from the Human Research Tissue Bank, supported by the NIHR Cambridge Biomedical Research Centre*

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