# abcam

## Product datasheet

## Anti-Src antibody [GD11] - BSA and Azide free ab269563



## 画像数3

#### 製品の概要

製品名 Anti-Src antibody [GD11] - BSA and Azide free

製品の詳細 Mouse monoclonal [GD11] to Src - BSA and Azide free

由来種 Mouse

アプリケーション 適用あり: WB, ICC/IF, IHC-P 種交差性 交差種: Mouse. Rat. Human

免疫原 Recombinant fragment corresponding to Chicken Src.

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 and rat testes tissue lysates. ICC/IF: HAP1 wildtype and HAP1-SRC

knockout cells. IHC-P: FFPE human testis tissue sections.

特記事項 ab269563 is the carrier-free version of ab231081.

This antibody clone is manufactured by Abcam. If you require a custom buffer formulation or conjugation for your experiments, please contact **orders@abcam.com**.

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 **conjugation kits** 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.

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

1

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. Do Not Freeze.

パッファー Constituent: PBS

キャリア・フリー はい

精製度 Protein G purified

**ポリ/モノ** モノクローナル

**ウローン名** GD11 **アイソタイプ** lgG1 **軽鎖の種類** kappa

#### 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ab269563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		Use a concentration of 1 µg/ml. Predicted molecular weight: 60 kDa.
ICC/IF		Use a concentration of 5 µg/ml.
IHC-P		Use at an assay dependent concentration. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

### 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.

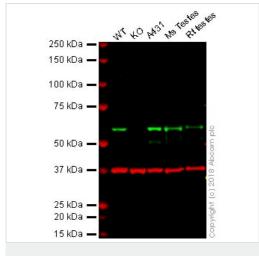
## 細胞内局在

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] - BSA and Azide free (ab269563)

#### 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

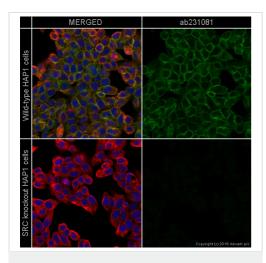
Lane 5: Rat testes whole tissue lysate

Lysates/proteins at 20 µg per lane.

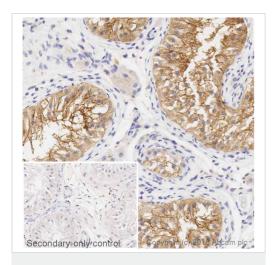
Predicted band size: 60 kDa

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.

This image was produced using the same antibody clone but in a different formulation <u>ab231081</u>, PBS and sodium azide.



Immunocytochemistry/ Immunofluorescence - Anti-Src antibody [GD11] - BSA and Azide free (ab269563)



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Src antibody [GD11] - BSA and Azide free (ab269563)

**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<sup>®</sup> 488) at 2 μg/ml (colored green) and **ab150084** (Goat secondary antibody to Rabbit IgG (Alexa Fluor<sup>®</sup> 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).

This image was produced using the same antibody clone but in a different formulation **ab231081**, PBS and sodium azide.

IHC image of Src staining in a section of formalin-fixed paraffinembedded human normal testis\* performed on a Leica BOND<sup>TM</sup> 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

This image was produced using the same antibody clone but in a different formulation **ab231081**, PBS and sodium azide.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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