# abcam

## Product datasheet

## Anti-KAT13A / SRC1 antibody ab5407

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#### Overview

**Immunogen** 

Product name Anti-KAT13A / SRC1 antibody

**Description** Rabbit polyclonal to KAT13A / SRC1

Host species Rabbit

Tested applications

Suitable for: WB, IHC-P, IP

Species reactivity

Reacts with: Mouse, Human

Predicted to work with: Chimpanzee, Rhesus monkey, Gorilla, Orangutan

Synthetic peptide corresponding to Human KAT13A/ SRC1 aa 600-650.

Database link: Q15788

General notes

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

**Properties** 

Form Liquid

**Storage instructions** Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.

Storage buffer pH: 7

Preservative: 0.1% Sodium azide

Constituents: 0.021% PBS, 1.764% Sodium citrate, 1.815% Tris

**Purity** Immunogen affinity purified

**Clonality** Polyclonal

**Isotype** IgG

**Applications** 

The Abpromise guarantee Our Abpromise guarantee covers the use of ab5407 in the following tested applications.

1

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		1/2000 - 1/10000.
IHC-P		1/500 - 1/2000.
IP	<b>★★★☆☆(1)</b>	Use at 2-10 μg/mg of lysate.

## **Target**

#### **Function**

Nuclear receptor coactivator that directly binds nuclear receptors and stimulates the transcriptional activities in a hormone-dependent fashion. Involved in the coactivation of different nuclear receptors, such as for steroids (PGR, GR and ER), retinoids (RXRs), thyroid hormone (TRs) and prostanoids (PPARs). Also involved in coactivation mediated by STAT3, STAT5A, STAT5B and STAT6 transcription factors. Displays histone acetyltransferase activity toward H3 and H4; the relevance of such activity remains however unclear. Plays a central role in creating multisubunit coactivator complexes that act via remodeling of chromatin, and possibly acts by participating in both chromatin remodeling and recruitment of general transcription factors. Required with NCOA2 to control energy balance between white and brown adipose tissues. Required for mediating steroid hormone response. Isoform 2 has a higher thyroid hormone-dependent transactivation activity than isoform 1 and isoform 3.

## **Tissue specificity**

#### Widely expressed.

#### Involvement in disease

Note=A chromosomal aberration involving NCOA1 is a cause of rhabdomyosarcoma.

Translocation t(2;2)(q35;p23) with PAX3 generates the NCOA1-PAX3 oncogene consisting of the N-terminus part of PAX3 and the C-terminus part of NCOA1. The fusion protein acts as a transcriptional activator. Rhabdomyosarcoma is the most common soft tissue carcinoma in childhood, representing 5-8% of all malignancies in children.

#### Sequence similarities

Belongs to the SRC/p160 nuclear receptor coactivator family.

Contains 1 basic helix-loop-helix (bHLH) domain.
Contains 1 PAS (PER-ARNT-SIM) domain.

### Domain

The C-terminal (1107-1441) part mediates the histone acetyltransferase (HAT) activity.

Contains 7 Leu-Xaa-Xaa-Leu-Leu (LXXLL) motifs. LXXLL motifs 3, 4 and 5 are essential for the association with nuclear receptors. LXXLL motif 7, which is not present in isoform 2, increases

the affinity for steroid receptors in vitro.

## Post-translational modifications

Sumoylated; sumoylation increases its interaction with PGR and prolongs its retention in the nucleus. It does not prevent its ubiquitination and does not exert a clear effect on the stability of the

protein.

 $Ubiquitin ated; leading \ to \ proteasome-mediated \ degradation. \ Ubiquitin ation \ and \ sum oylation \ take$ 

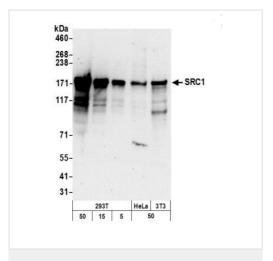
place at different sites.

Phosphorylated upon DNA damage, probably by ATM or ATR.

#### **Cellular localization**

### Nucleus.

#### **Images**



Western blot - Anti-KAT13A / SRC1 antibody (ab5407)

All lanes: Anti-KAT13A / SRC1 antibody (ab5407) at 0.1 µg/ml

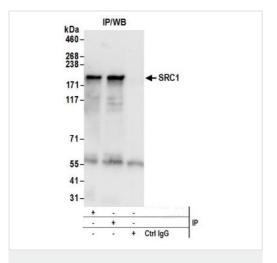
Lane 1 : 293T whole cell lysate at 50  $\mu$ g Lane 2 : 293T whole cell lysate at 15  $\mu$ g Lane 3 : 293T whole cell lysate at 5  $\mu$ g

Lane 4: HeLa cells at 50 µg

Lane 5: Mouse NIH3T3 cells at 50 µg

Detection:Chemiluminescence

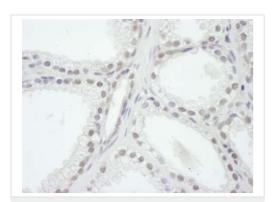
Exposure time:30 seconds



Immunoprecipitation - Anti-KAT13A / SRC1 antibody (ab5407)

KAT13A/SRC1 was immunoprecipitated from 1mg of 293T cells prepared using NETN lysis buffer.

Exposure time: 10 seconds.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-KAT13A / SRC1 antibody (ab5407)

Immunohistochemical analysis of paraffin-embedded
Human prostate carcinoma labeling KAT13A/SRC1 with ab5407 at
1/1000 dilution.

Detection: DAB.

Counter stained with Hematoxylin.

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