abcam

Product datasheet

Anti-SRC3 antibody ab2831

11 References 4 Images

Overview

Product name	Anti-SRC3 antibody
Description	Rabbit polyclonal to SRC3
Host species	Rabbit
Specificity	Detects amplified in breast cancer 1 (AIB1).
Tested applications	**Suitable for:** WB, ChIP, IHC-P, ICC/IF
Species reactivity	**Reacts with:** Human **Predicted to work with:** Xenopus laevis
Immunogen	Synthetic peptide corresponding to Human SRC3 aa 3-15. Sequence: GLGENLDPLASDS (Peptide available as **ab4915**) Run BLAST with Run BLAST with
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. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle.
Storage buffer	Preservative: 0.05% Sodium azide Constituents: 0.1% BSA, 99% PBS
Purity	Immunogen affinity purified
Clonality	Polyclonal

Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab2831 in the following tested applications.

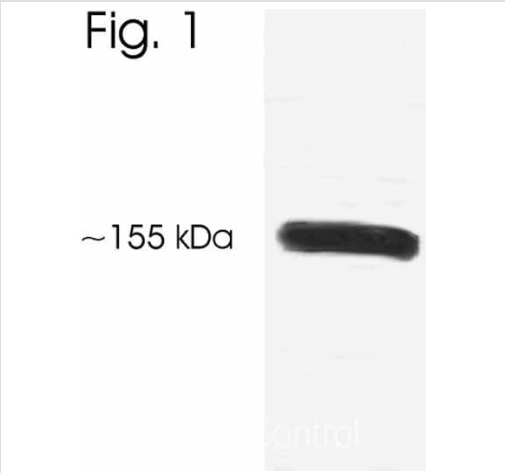
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		Use a concentration of 2 µg/ml. Predicted molecular weight: 155 kDa. Can be blocked with AIB1 peptide or reuse.
ChIP		Use at an assay dependent concentration.
IHC-P		Use a concentration of 5 µg/ml. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.
ICC/IF		Use at an assay dependent concentration.

Target

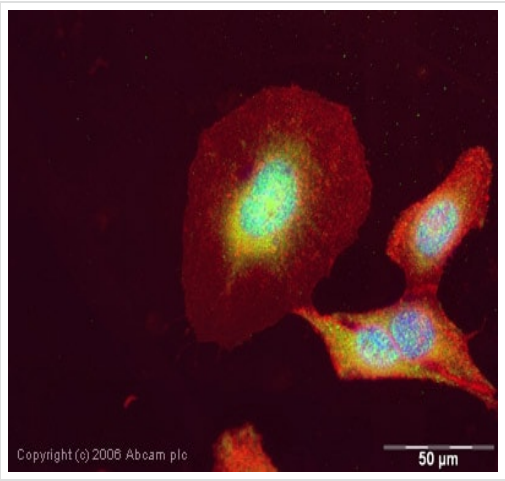
Function	Nuclear receptor coactivator that directly binds nuclear receptors and stimulates the transcriptional activities in a hormone-dependent fashion. Plays a central role in creating a multisubunit coactivator complex, which probably acts via remodeling of chromatin. Involved in the coactivation of different nuclear receptors, such as for steroids (GR and ER), retinoids (RARs and RXRs), thyroid hormone (TRs), vitamin D3 (VDR) and prostanoids (PPARs). Displays histone acetyltransferase activity. Also involved in the coactivation of the NF-kappa-B pathway via its interaction with the NFKB1 subunit. Interacts with PSMB9.
Tissue specificity	Widely expressed. High expression in heart, skeletal muscle, pancreas and placenta. Low expression in brain, and very low in lung, liver and kidney.
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	Contains three Leu-Xaa-Xaa-Leu-Leu (LXXLL) motifs. Motifs 1 and 2 are essential for the association with nuclear receptors, and constitute the RID domain (Receptor-interacting domain).
Post-translational modifications	Acetylated by CREBBP. Acetylation occurs in the RID domain, and disrupts the interaction with nuclear receptors and regulates its function. Methylated by CARM1. Phosphorylated by IKK complex. Regulated its function.
Cellular localization	Cytoplasm. Nucleus. Mainly cytoplasmic and weakly nuclear. Upon TNF activation and subsequent phosphorylation, it translocates from the cytoplasm to the nucleus.

Images



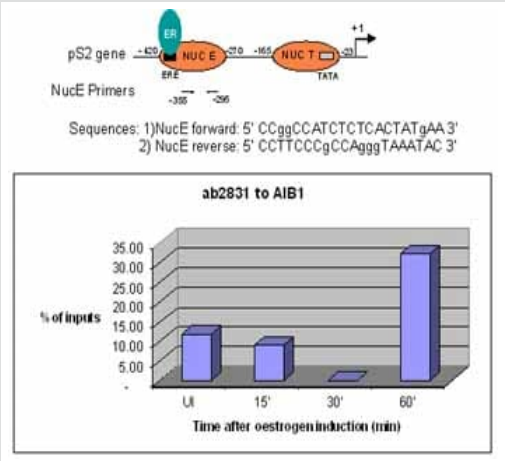
Western blot - Anti-SRC3 antibody (ab2831)

Western blot of Human 2831 in T47D cell lysate using ab2831.



Immunocytochemistry/ Immunofluorescence - Anti-SRC3 antibody (ab2831)

ICC/IF image of ab2831 stained human HeLa cells. The cells were methanol fixed (5 min) and incubated with the antibody (ab2831, 5µg/ml) for 1h at room temperature. The secondary antibody (green) was Alexa Fluor® 488 goat anti-rabbit IgG (H+L) used at a 1/1000 dilution for 1h. Image-iT^{TM} FX Signal Enhancer was used as the primary blocking agent, 5% BSA (in TBS-T) was used for all other blocking steps. DAPI was used to stain the cell nuclei (blue). Alexa Fluor® 594 WGA was used to label plasma membranes (red).

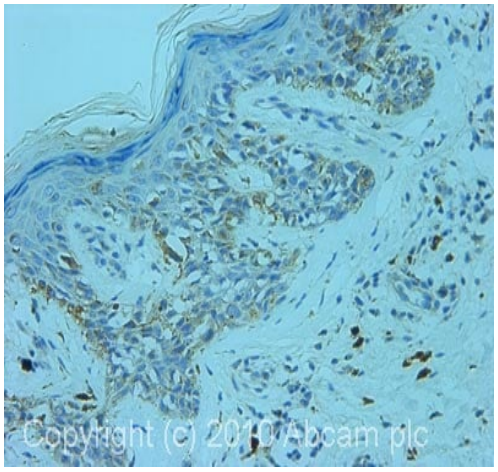


ChIP - Anti-SRC3 antibody (ab2831)

This image is courtesy of Sylvain Daujat

ab2831 can be used in ChIP. You can expect recruitment of AIB1on the pS2 promoter at some point during transcriptional activation. The amount of DNA precipiated is significant.

Sonicated Chromatin prepared from untreated or 17beta-estradiol (E2) treated MCF7 cells was subjected to the ChIP procedure with ab2831 to AIB1 and the immunoprecipitated chromatin was analysed in the proximal region of the estrogen-responsive pS2 promoter (as shown above) and quantified by real-time PCR (values are % of inputs). The primers are designed to follow the nucleosome E (including the Estrogen Responsive Element ERE). 3 µl of ab2831 and 2x106 cells were used in each ChIP experiment.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-SRC3 antibody (ab2831)

IHC image of ab2831 staining in human melanoma formalin fixed paraffin embedded tissue section, 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 20 mins. The section was then incubated with ab2831, 5µg/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.

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.

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