abcam

Product datasheet

Anti-SRC3 antibody ab10310

2 References 2 Images

Overview

Product name	Anti-SRC3 antibody
Description	Rabbit polyclonal to SRC3
Host species	Rabbit
Tested applications	**Suitable for:** IP, WB
Species reactivity	**Reacts with:** Human **Predicted to work with:** Chimpanzee, Orangutan
Immunogen	Synthetic peptide within Human SRC3 aa 900-1000. The exact immunogen sequence used to generate this antibody is proprietary information. If additional detail on the immunogen is needed to determine the suitability of the antibody for your needs, please **contact** our Scientific Support team to discuss your requirements. Database link: **Q9Y6Q9**

General notes

Steroid and thyroid hormones and retinoic acid regulate a complex array of gene expression activity via intracellular receptor transcription factors belonging to the ligand dependent nuclear receptor superfamily. Adding to the complexity of function of these transcription factors are associated proteins known as coactivators and corepressors which, as their names suggest, enhance or depress transcriptional activity of the nuclear receptor with which they associate. SRC3 is a nuclear receptor coactivator that interacts with nuclear hormone receptors to enhance their transcriptional activator functions. The protein has histone acetyltransferase activity and recruits p300/CBP-associated factor and CREB binding protein as part of a multisubunit coactivation complex. This protein is initially found in the cytoplasm but is translocated into the nucleus upon phosphorylation. Two transcript variants encoding different isoforms have been found for this gene. In addition, a polymorphic repeat region is found in the C-terminus of the encoded protein.

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
Primary antibody notes	Steroid and thyroid hormones and retinoic acid regulate a complex array of gene expression activity via intracellular receptor transcription factors belonging to the ligand dependent nuclear receptor superfamily. Adding to the complexity of function of these transcription factors are associated proteins known as coactivators and corepressors which, as their names suggest, enhance or depress transcriptional activity of the nuclear receptor with which they associate. SRC3 is a nuclear receptor coactivator that interacts with nuclear hormone receptors to enhance their transcriptional activator functions. The protein has histone acetyltransferase activity and recruits p300/CBP-associated factor and CREB binding protein as part of a multisubunit coactivation complex. This protein is initially found in the cytoplasm but is translocated into the nucleus upon phosphorylation. Two transcript variants encoding different isoforms have been found for this gene. In addition, a polymorphic repeat region is found in the C-terminus of the encoded protein.
Clonality	Polyclonal
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab10310 in the following tested applications.

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

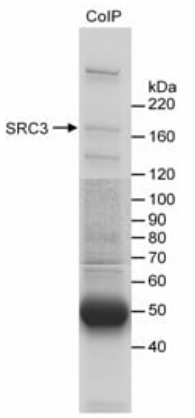
Application	Abreviews	Notes
IP		Use a concentration of 1 - 4 µg/ml.
WB		1/1000 - 1/10000. Detects a band of approximately 170 kDa (predicted molecular weight: 170 kDa).

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.

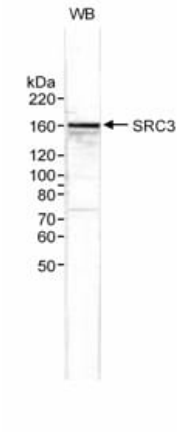
Images



Immunoprecipitation - Anti-SRC3 antibody (ab10310)

Detection of SCR3 by Immunoprecipitation.

Samples: Nuclear extract (10 mg) from HeLa cells. Antibody used at 20 µg/ml extract. Detection: Coomassie Brilliant Blue R250 staining of SDS-PAGE gel followed by mass spectrometry to confirm the identity of the band that is SRC3.



Western blot - Anti-SRC3 antibody (ab10310)

Detection of SRC3 by Western Blot.

Samples: Nuclear extract (5 µg) from HeLa cells. Primary antibody ab10310 used at 0.33 µg/ml. Detection: Alkaline phosphatase conjugated goat anti-rabbit IgG diluted 1/3000 with NBT-BCIP as substrate for 20 min.

Detection of SCR3 by Immunoprecipitation. Samples: Nuclear extract (10 mg) from HeLa cells. Antibody used at 20 µg/ml extract. Detection: Coomassie Brilliant Blue R250 staining of SDS-PAGE gel followed by mass spectrometry to confirm the identity of the band that is SRC3.

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