

Product datasheet

Anti-c-Jun antibody - ChIP Grade ab31419

★★★★★ 13 Abreviews 41 References 7 Images

Overview

Product name	Anti-c-Jun antibody - ChIP Grade
Description	Rabbit polyclonal to c-Jun - ChIP Grade
Host species	Rabbit
Specificity	Antibody detects endogenous levels of c-Jun protein around Serine 243.
Tested applications	Suitable for: ChIP, ICC/IF, IHC-P, IP, WB, ELISA, Flow Cyt
Species reactivity	Reacts with: Mouse, Rat, Human, African green monkey Predicted to work with: Chicken, Cow, Pig
Immunogen	Synthetic peptide within Human c-Jun aa 210-259. The exact sequence is proprietary. Sequence: HLPQQMPVQHPRLQALKEEPQTVPEMPGETPPLSPID MESQERIKAERKR Database link: P05412 Run BLAST with Run BLAST with
Positive control	ChIP: Human endothelial cells (EA.hy926). IHC-P: Human breast carcinoma tissue. ICC/IF: HepG2 cells. WB: Extracts of HeLa cells. Recombinant Human c-Jun protein. Flow Cytometry: Jurkat cells.

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. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.40 Preservative: 0.02% Sodium azide Constituents: PBS, 50% Glycerol, 0.87% Sodium chloride Without Mg ²⁺ and Ca ²⁺
Purity	Immunogen affinity purified
Purification notes	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.

Clonality	Polyclonal
Isotype	IgG

Applications

Our [Abpromise guarantee](#) covers the use of **ab31419** in the following tested applications.

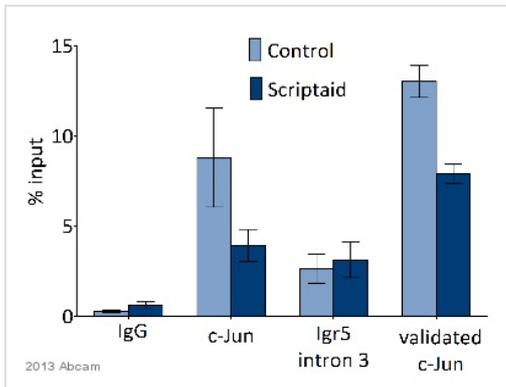
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
ChIP	★★★★★	Use at an assay dependent concentration.
ICC/IF		Use a concentration of 1 µg/ml.
IHC-P	★★★★★	1/50 - 1/100.
IP	★★★★★	Use at an assay dependent concentration.
WB	★★★★★	1/500 - 1/1000. Predicted molecular weight: 36 kDa.
ELISA		1/20000.
Flow Cyt	★★★★★	1/300. ab171870 - Rabbit polyclonal IgG, is suitable for use as an isotype control with this antibody.

Target

Function	Transcription factor that recognizes and binds to the enhancer heptamer motif 5'-TGA[CG]TCA-3'. Promotes activity of NR5A1 when phosphorylated by HIPK3 leading to increased steroidogenic gene expression upon cAMP signaling pathway stimulation. Involved in activated KRAS-mediated transcriptional activation of USP28 in colorectal cancer (CRC) cells (PubMed:24623306). Binds to the USP28 promoter in colorectal cancer (CRC) cells (PubMed:24623306).
Sequence similarities	Belongs to the bZIP family. Jun subfamily. Contains 1 bZIP (basic-leucine zipper) domain.
Post-translational modifications	Ubiquitinated by the SCF(FBXW7), leading to its degradation. Ubiquitination takes place following phosphorylation, that promotes interaction with FBXW7. Phosphorylated by CaMK4 and PRKDC; phosphorylation enhances the transcriptional activity. Phosphorylated by HIPK3. Phosphorylated by DYRK2 at Ser-243; this primes the protein for subsequent phosphorylation by GSK3B at Thr-239. Phosphorylated at Thr-239, Ser-243 and Ser-249 by GSK3B; phosphorylation reduces its ability to bind DNA. Phosphorylated by PAK2 at Thr-2, Thr-8, Thr-89, Thr-93 and Thr-286 thereby promoting JUN-mediated cell proliferation and transformation. Phosphorylated by PLK3 following hypoxia or UV irradiation, leading to increase DNA-binding activity. Acetylated at Lys-271 by EP300.
Cellular localization	Nucleus.

Images



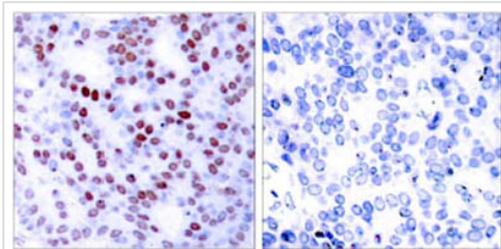
ChIP - Anti-c-Jun antibody - ChIP Grade (ab31419)

This image is courtesy of an anonymous abreview.

ChIP analysis using ab31419 binding c-Jun in human endothelial cells (EA.hy926). Cells were cross-linked for 10 minutes with formaldehyde then incubated with undiluted primary antibody for 10 hours at 4°C in 1x ChIP buffer. Protein binding was detected using real-time PCR.

Positive control: Position 89340150-89340297 in chromosome 11 (has a validated c-Jun site).

Negative Control: Igr5 intron 3 (contains no c-Jun binding site).

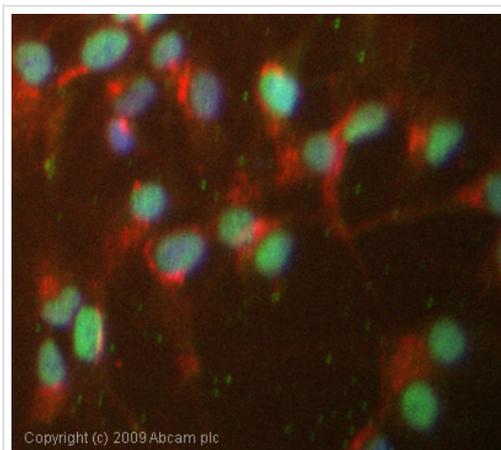


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-c-Jun antibody - ChIP Grade (ab31419)

Paraffin-embedded human breast carcinoma tissue stained for c-Jun with ab31419 at a 1/50 dilution in immunohistochemical analysis.

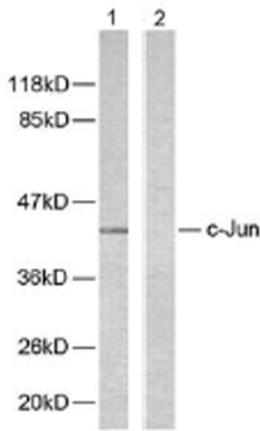
Left panel: Untreated.

Right panel: Pre-incubated with synthesized peptide.



Immunocytochemistry/ Immunofluorescence - Anti-c-Jun antibody - ChIP Grade (ab31419)

ICC/IF image of HepG2 (Human liver hepatocellular carcinoma cell line) cells labeling c-Jun (green) with ab31419 at 1 µg/ml. The cells were fixed in 4% PFA (10 minutes) and then incubated in 1% BSA / 10% normal goat serum / 0.3M glycine in 0.1% PBS-Tween for 1 hour to permeabilize the cells and block non-specific protein-protein interactions. The cells were then incubated with ab31419 at 1 µg/ml overnight at +4 °C. The secondary antibody (green) was Alexa Fluor® 488 goat anti-rabbit IgG (H+L) ab150077 used at a 1/1000 dilution for 1 hour. Alexa Fluor® 594 WGA was used to label plasma membranes (red) at a 1/200 dilution for 1 hour. DAPI was used to stain the cell nuclei (blue) at a concentration of 1.43 µM.



Western blot - Anti-c-Jun antibody - ChIP Grade (ab31419)

All lanes : Anti-c-Jun antibody - ChIP Grade (ab31419) at 1/500 dilution

Lane 1 : Extracts of HeLa (Human epithelial cell line from cervix adenocarcinoma) cells

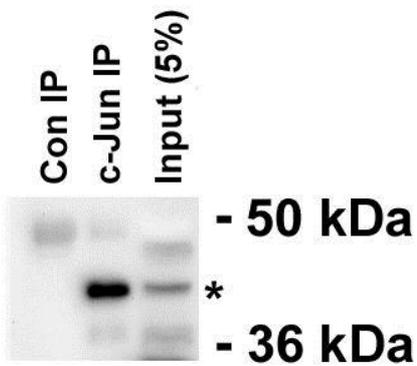
Lane 2 : Extracts of HeLa (Human epithelial cell line from cervix adenocarcinoma) cells with immunizing peptide

Predicted band size: 36 kDa

Observed band size: 43 kDa

[why is the actual band size different from the predicted?](#)

2007 Abcam



Immunoprecipitation - Anti-c-Jun antibody - ChIP Grade (ab31419)

Verified customer

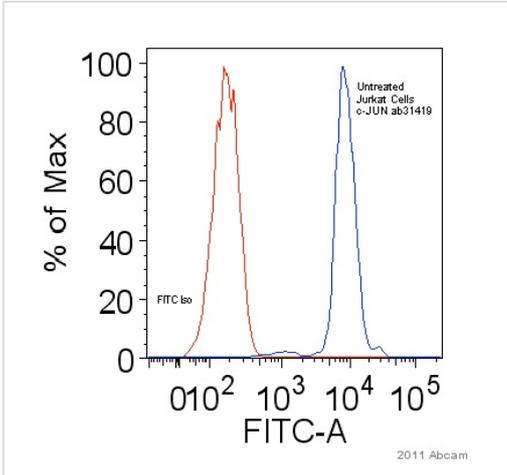
c-Jun was immunoprecipitated from HEK-293T (Human epithelial cell line from embryonic kidney transformed with large T antigen) whole cell lysate using ab31419 at a 1/500 dilution.

Lane 1: Control IgG IP in HEK-293T whole cell lysate.

Lane 2: ab31419 in HEK-293T whole cell lysate.

Lane 3: c-Jun in HEK-293T whole cell lysate 500 µg (Input).

For western blotting an HRP-conjugated swine anti-rabbit polyclonal was used as the secondary antibody.



Flow Cytometry - Anti-c-Jun antibody - ChIP Grade (ab31419)

This image is courtesy of an anonymous abreview.

Overlay histogram showing Jurkat (Human T cell leukemia cell line from peripheral blood) cells stained with ab31419 (blue line) at a 1/300 dilution. The cells were prepared as follows: Spin down, wash in FACS buffer 1x, fix, wash 2x, and stain with primary antibody overnight. Buffer was 0.1% sodium azide with FBS in phosphate buffered solution. Cells were fixed using paraformaldehyde and permeabilized using Triton X-100 and NP40. Cells were gated by isolating cell population from plot of SSC-A / FSA-A. The secondary antibody used was a FITC-conjugated Goat anti-Rabbit polyclonal, diluted 1/100.



Western blot - Anti-c-Jun antibody - ChIP Grade (ab31419)

Anti-c-Jun antibody - ChIP Grade (ab31419) at 1/500 dilution + Recombinant Human c-Jun protein (ab54318) at 0.01 µg

Secondary

Goat Anti-Rabbit IgG H&L (HRP) preadsorbed (ab97080) at 1/5000 dilution

Developed using the ECL technique.

Performed under reducing conditions.

Predicted band size: 36 kDa

Exposure time: 30 seconds

Please note: All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE"

Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours

- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <https://www.abcam.com/abpromise> or contact our technical team.

Terms and conditions

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors