abcam

Product datasheet

Anti-c-Jun antibody ab31419

★★★★★ 13 Abreviews 84 References 4 Images

Overview

Product name	Anti-c-Jun antibody
Description	Rabbit polyclonal to c-Jun
Host species	Rabbit
Specificity	Antibody detects endogenous levels of c-Jun protein around Serine 243.
Tested applications	**Suitable for:** ELISA, ICC/IF, IP, ChIP, Flow Cyt, IHC-P, WB
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: HLPQQMPVQHPRLQALKEEPQTVPEMPGETPPLSPIDME SQERIKAERKR Database link: **P05412** 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. Avoid freeze / thaw cycle.
Storage buffer	pH: 7 Preservative: 0.02% Sodium azide Constituents: PBS, 50% Glycerol, 0.87% Sodium chloride

	Without Mg2+ and Ca2+
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

The Abpromise guarantee 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
ELISA		Use at an assay dependent concentration.
ICC/IF		Use a concentration of 1 µg/ml.
IP	★★★★★ (2)	Use at an assay dependent concentration.
ChIP	★★★★★ (1)	Use at an assay dependent concentration.
Flow Cyt	★★★★★ (1)	Use at an assay dependent concentration. **ab171870** - Rabbit polyclonal IgG, is suitable for use as an isotype control with this antibody.
IHC-P	★★★★★ (2)	1/50 - 1/100.
WB	★★★★☆ (7)	1/500 - 1/1000. Predicted molecular weight: 36 kDa.

Target

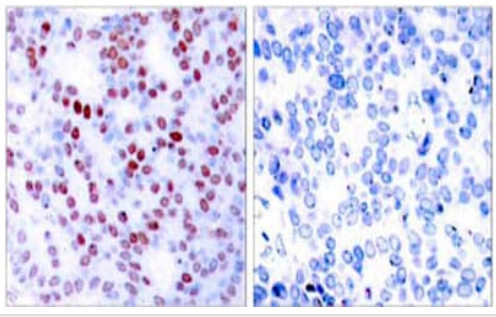
Function Transcription factor that recognizes and binds to the enhancer heptamer motif 5'-TGA[CG]TCA-3'. Promotes activity of NR5A1 when phosphorylated by HIPK3 leading to increased steroidogenic gene expression upon cAMP signaling pathway stimulation. Involved in activated KRAS-mediated transcriptional 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

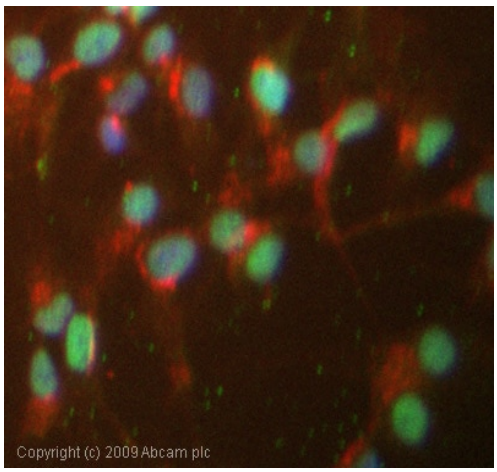


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-c-Jun antibody (ab31419)

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

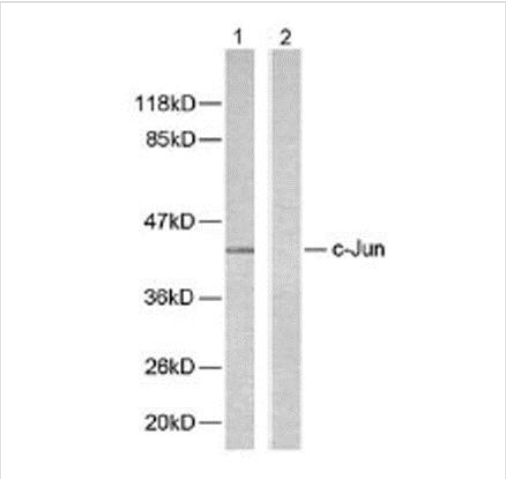
Left panel: Untreated.

Right panel: Pre-incubated with synthesized peptide.



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

All lanes : Anti-c-Jun antibody (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

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

Anti-c-Jun antibody (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

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