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antibody and ELISA experts

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Anti-c-Jun/JUN Antibody Picoband®

Catalog Number: A02038-3

About JUN

c-Jun is a protein that in humans is encoded by the JUN gene. This gene is the putative transforming gene of avian sarcoma virus 17. It encodes a protein which is highly similar to the viral protein, and which interacts directly with specific target DNA sequences to regulate gene expression. This gene is intronless and is mapped to 1p32-p31, a chromosomal region involved in both translocations and deletions in human malignancies.

Overview

Product Name	Anti-c-Jun/JUN Antibody Picoband®
Reactive Species	Human
Description	Boster Bio Anti-c-Jun/JUN Antibody Picoband® catalog # A02038-3. Tested in ELISA, Flow Cytometry, IF, IHC, ICC, WB applications. This antibody reacts with Human. The brand Picoband indicates this is a premium antibody that guarantees superior quality, high affinity, and strong signals with minimal background in Western blot applications. Only our best-performing antibodies are designated as Picoband, ensuring unmatched performance.
Application	ELISA, Flow Cytometry, IF, IHC, ICC, WB
Clonality	Polyclonal
Formulation	Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na2HPO4.
Storage Instructions	At -20°C for one year from date of receipt. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for six months. Avoid repeated freezing and thawing.
Host	Rabbit
Uniprot ID	P05412

Technical Details

Immunogen	E.coli-derived human c-Jun/JUN recombinant protein (Position: K35-F331).
Recommended Detection Systems	Boster recommends Enhanced Chemiluminescent Kit with anti-Rabbit IgG (EK1002) for Western blot, and HRP Conjugated anti-Rabbit IgG Super Vision Assay Kit (SV0002-1) for IHC(P) and ICC.
Cross Reactivity	No cross-reactivity with other proteins.
Isotype	Rabbit IgG
Form	Lyophilized
Concentration	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml.
Purification	Immunogen affinity purified.

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Suggested Dilutions	Western blot, 0.25-0.5 ug/ml, Human Immunohistochemistry(Paraffin-embedded Section), 2-5 ug/ml, Human Immunocytochemistry/Immunofluorescence, 5 ug/ml, Human Flow Cytometry (Fixed), 1-3 ug/1x10^6 cells, Human ELISA, 0.1-0.5 ug/ml, -

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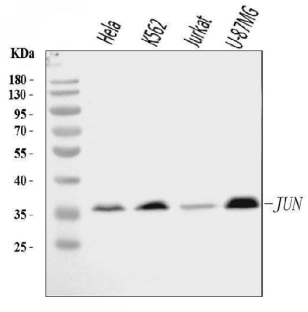
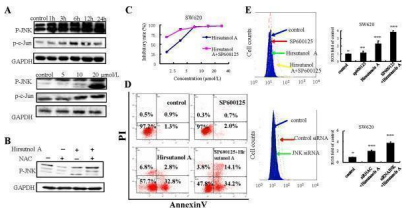
Anti-c-Jun/JUN Antibody Picoband® (A02038-3) Images



Western blot analysis of C-Jun/JUN using anti-C-Jun/JUN antibody (A02038-3). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions. Lane 1: human Hela whole cell lysates, Lane 2: human K562 whole cell lysates, Lane 3: human Jurkat whole cell lysates, Lane 4: human U-87MG whole cell lysates. After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-C-Jun/JUN antigen affinity purified polyclonal antibody (Catalog # A02038-3) at 0.5 ug/mL overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:5000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for C-Jun/JUN at approximately 36 kDa. The expected band size for C-Jun/JUN is at 36 kDa.



Hirsutanol A activated JNK signaling pathway through elevating of ROS production and blockage of JNK signal pathway increased apoptosis and elevated ROS level induced by hirsutanol A. SW620 cells were treated with 20 umol/L hirsutanol A for indicated times or various concentrations of hirsutanol A for 24 h. The expression of p-JNK and p-c-Jun were detected by immunoblotting assay (A). SW620 cells were pre-incubated with NAC for 1 h, then treated with 20 umol/L hirsutanol A for 24 h. The expression of p-JNK was determined by immunoblotting assay (B). SW620 cells were pre-incubated with SP600125 for 1 h , then treated with 20 umol/L hirsutanol A for 72 h. Cell growth inhibition were detected by MTT assay (C). SW620 cells were pre-incubated with SP600125 for 1 h , then treated with 20 umol/L hirsutanol A for 48 h. Cell apoptosis was detected by AnnexinV/PI analysis (D). SW620 cells were pre-incubated with SP600125 for 1 h or transfected with JNK- siRNA to block JNK signaling pathway, then treated with 20 umol/L hirsutanol A for 3 h. Cellular ROS level was monitored by flow cytometry. Results are presented as means ± SD from 3 independent experiments. (**<0.05 versus *; ***<0.01 versus *) (E). Index in PubMed under a CC BY license. PMID: 23394457

IHC analysis of C-Jun/JUN using anti-C-Jun/JUN antibody (A02038-3). C-Jun/JUN was detected in a paraffin-embedded section of human renal cell carcinoma tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 ug/ml rabbit anti-C-Jun/JUN Antibody (A02038-3)

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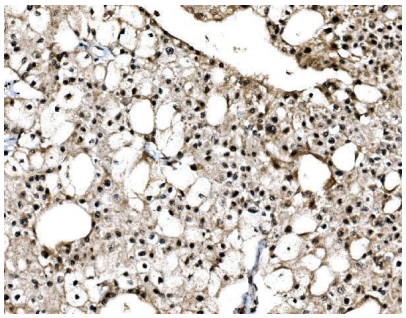
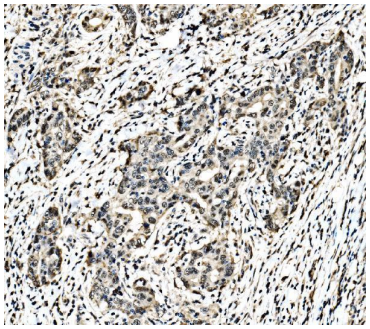
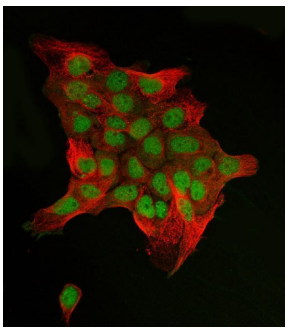


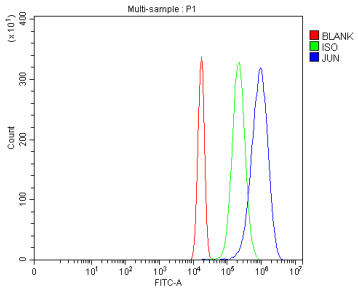
overnight at 4°C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Catalog # SV0002) with DAB as the chromogen.



IHC analysis of C-Jun/JUN using anti-C-Jun/JUN antibody (A02038-3). C-Jun/JUN was detected in a paraffin-embedded section of human the renal pelvis squamous metaplasia tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 ug/ml rabbit anti-C-Jun/JUN Antibody (A02038-3) overnight at 4°C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Catalog # SV0002) with DAB as the chromogen.



IF analysis of C-Jun/JUN using anti-C-Jun/JUN antibody (A02038-3) and anti-Beta Tubulin antibody (M01857-3). C-Jun/JUN was detected in immunocytochemical section of A431 cells. Enzyme antigen retrieval was performed using IHC enzyme antigen retrieval reagent (AR0022) for 15 mins. The cells were blocked with 10% goat serum. And then incubated with 5 ug/mL rabbit anti-C-Jun/JUN beta Antibody (A02038-3) and mouse anti-Beta Tubulin antibody (M01857-3) overnight at 4°C. DyLight®488 Conjugated Goat Anti-Rabbit IgG (BA1127) and DyLight®594 Conjugated Goat Anti-Mouse IgG (BA1141) were used as secondary antibody at 1:100 dilution and incubated for 30 minutes at 37°C. Visualize using a fluorescence microscope and filter sets appropriate for the label used.



Flow Cytometry analysis of U20S cells using anti-C-Jun/JUN antibody (A02038-3). Overlay histogram showing U20S cells stained with A02038-3 (Blue line). To facilitate intracellular staining, cells were fixed with 4% paraformaldehyde and permeabilized with permeabilization buffer. The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-C-Jun/JUN Antibody (A02038-3, 1 ug/1x106 cells) for 30 min at 20°C. DyLight®488 conjugated goat anti-rabbit IgG (BA1127, 5-10 ug/1x106 cells) was used as secondary antibody for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG (1 ug/1x106) used under the same conditions. Unlabelled sample without incubation with primary antibody and secondary antibody (Red line) was used as a blank control.

3 Publications Citing This Product

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1. PubMed ID: 10.1186/1479-5876-11-32, Hirsutanol A, a novel sesquiterpene compound from fungus Chondrostereum sp., induces apoptosis and inhibits tumor growth through mitochondrial-independent ROS production: Hirsutanol A inhibits tumor growth through ROS production

2. PubMed ID: 10.1016/j.tiv.2016.12.016, Alterations in transcription and protein expressions of HCC-related genes in HepG2 cells caused by microcystin-LR

3. PubMed ID: 10.1007/s10565-008-9054-1, Genistein induces G 2 /M cell cycle arrest via stable activation of ERK1/2 pathway in MDA-MB-231 breast cancer cells

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