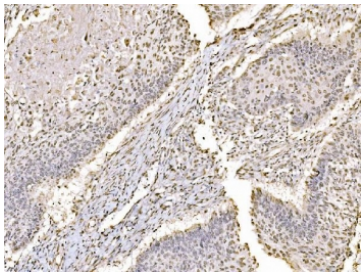
JUN Antibody / AP-1 Transcription Factor Antibody (RQ7978)

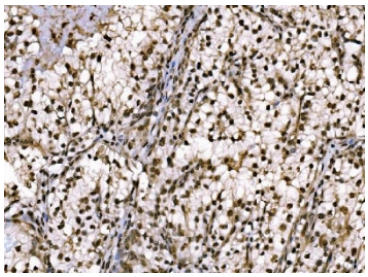
Catalog No.	Formulation	Size
RQ7978	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

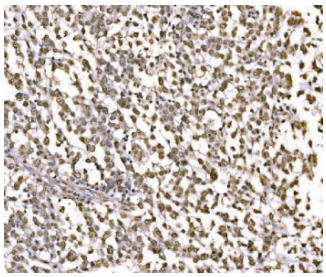
Availability	1-3 business days
Species Reactivity	Human
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity purified
Buffer	Lyophilized from 1X PBS with 2% Trehalose
UniProt	P05412
Localization	Nuclear
Applications	Western blot: 0.5-1ug/ml Immunohistochemistry (FFPE): 2-5ug/ml Immunofluorescence: 5ug/ml
Limitations	This JUN Antibody / AP-1 Transcription Factor Antibody is available for research use only.



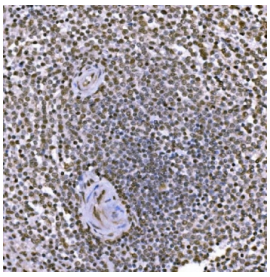
JUN Antibody Laryngeal Squamous Cell Carcinoma IHC. Immunohistochemical staining of FFPE human laryngeal squamous cell carcinoma tissue using JUN Antibody demonstrates predominantly nuclear HRP-DAB brown staining within malignant squamous epithelial cell populations. The staining pattern is consistent with expression of JUN (c-Jun), a key component of the AP-1 transcription factor complex that regulates gene expression involved in cellular proliferation, differentiation, stress responses, and tissue remodeling. Nuclear localization of JUN is consistent with its established role as a DNA-binding transcription factor that mediates signal-dependent transcriptional regulation and cellular adaptation. HIER: boil tissue sections in pH 8 EDTA buffer for 20 minutes and allow to cool before testing.



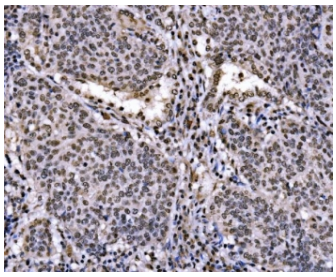
JUN Antibody Renal Clear Cell Carcinoma IHC. Immunohistochemical staining of FFPE human renal clear cell carcinoma tissue using JUN Antibody demonstrates strong nuclear HRP-DAB brown staining throughout neoplastic cell populations. The staining pattern is consistent with expression of JUN (c-Jun), a DNA-binding component of the AP-1 transcription factor complex that regulates gene expression involved in cellular proliferation, differentiation, stress responses, and signal-dependent transcriptional programs. The prominent nuclear localization observed within tumor cells is characteristic of an active transcription factor and supports the role of JUN in coordinating gene regulatory networks that influence cellular adaptation and tissue remodeling. HIER: boil tissue sections in pH 8 EDTA buffer for 20 minutes and allow to cool before testing.



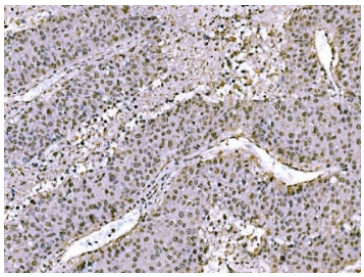
JUN Antibody Human Pancreatic Cancer IHC. Immunohistochemical staining of FFPE human pancreatic cancer tissue using JUN Antibody demonstrates extensive nuclear HRP-DAB brown staining throughout malignant epithelial cell populations. The staining pattern is consistent with expression of JUN (c-Jun), a DNA-binding component of the AP-1 transcription factor complex that regulates gene expression involved in cellular proliferation, differentiation, stress responses, and signal-dependent transcriptional regulation. The predominantly nuclear localization observed within tumor cells is characteristic of a transcription factor actively engaged in gene regulatory processes and supports the role of JUN in coordinating transcriptional networks associated with cellular adaptation and tumor biology. HIER: boil tissue sections in pH 8 EDTA buffer for 20 minutes and allow to cool before testing.



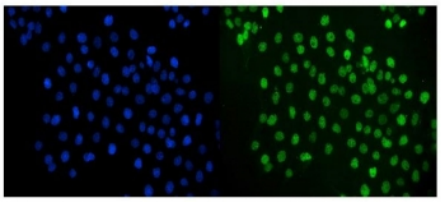
JUN Antibody Human Spleen IHC. Immunohistochemical staining of FFPE human spleen tissue using JUN Antibody demonstrates widespread nuclear HRP-DAB brown staining throughout splenic cellular populations, with particularly prominent staining surrounding lymphoid follicles. The staining pattern is consistent with expression of JUN (c-Jun), a DNA-binding component of the AP-1 transcription factor complex that regulates gene expression involved in immune responses, cellular activation, differentiation, and stress-responsive signaling pathways. The predominantly nuclear localization is characteristic of a transcription factor and supports the role of JUN in coordinating transcriptional programs within immune-associated tissues. HIER: boil tissue sections in pH 8 EDTA buffer for 20 minutes and allow to cool before testing.



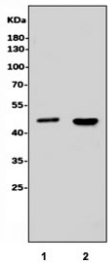
JUN Antibody Human Lung Cancer IHC. Immunohistochemical staining of FFPE human lung cancer tissue using JUN Antibody demonstrates widespread nuclear HRP-DAB brown staining throughout malignant tumor cell populations. The staining pattern is consistent with expression of JUN (c-Jun), a DNA-binding component of the AP-1 transcription factor complex that regulates gene expression involved in cellular proliferation, differentiation, stress responses, and signal-dependent transcriptional programs. The strong nuclear localization observed across neoplastic cells is characteristic of a transcription factor and supports the role of JUN in coordinating gene regulatory networks that influence cellular adaptation, growth, and tumor-associated signaling. HIER: boil tissue sections in pH 8 EDTA buffer for 20 minutes and allow to cool before testing.



JUN Antibody Human Liver Cancer IHC. Immunohistochemical staining of FFPE human liver cancer tissue using JUN Antibody demonstrates widespread nuclear HRP-DAB brown staining throughout malignant hepatocellular populations. The staining pattern is consistent with expression of JUN (c-Jun), a DNA-binding component of the AP-1 transcription factor complex that regulates gene expression involved in cellular proliferation, differentiation, stress responses, and signal-dependent transcriptional regulation. The predominantly nuclear localization observed within tumor cells is characteristic of an active transcription factor and supports the role of JUN in coordinating gene regulatory networks that govern cellular adaptation, growth control, and tissue remodeling. HIER: boil tissue sections in pH 8 EDTA buffer for 20 minutes and allow to cool before testing.



JUN Antibody A431 Cell IF. Immunofluorescent staining of FFPE human A431 cells using JUN Antibody demonstrates strong green nuclear staining throughout the cell population, consistent with localization of JUN (c-Jun), a DNA-binding component of the AP-1 transcription factor complex. JUN functions as a key regulator of gene expression involved in cellular proliferation, differentiation, stress responses, and signal-dependent transcriptional regulation. The highly restricted nuclear staining pattern is characteristic of a transcription factor and supports the role of JUN in controlling transcriptional programs that govern cellular adaptation and signaling responses. DAPI (blue) counterstains cell nuclei. HIER: steam tissue sections in pH 6 citrate buffer for 20 minutes prior to staining.



JUN Antibody U-2 OS and PC-3 Western Blot. Western blot analysis of human U-2 OS (lane 1) and PC-3 (lane 2) cell lysates using JUN Antibody demonstrates distinct bands at approximately 36-43 kDa, consistent with the predicted and commonly observed molecular weight range of JUN (c-Jun). JUN is a DNA-binding component of the AP-1 transcription factor complex that regulates gene expression involved in cellular proliferation, differentiation, stress responses, and signal-dependent transcriptional regulation. Detection of the expected molecular weight band in both cell lines supports expression of JUN and its role as a key regulator of transcriptional programs that govern cellular adaptation and signaling responses.

Description

JUN antibody is useful for studying JUN, a DNA-binding transcription factor that functions as a central component of the activator protein-1 (AP-1) transcription factor complex. AP-1 regulates the expression of numerous genes involved in cellular proliferation, differentiation, apoptosis, inflammation, tissue remodeling, and responses to extracellular stimuli. Through its ability to integrate signals from multiple upstream pathways, JUN serves as an important regulator of gene expression and cellular adaptation in both normal physiology and disease-associated processes.

JUN encodes the c-Jun protein, which forms homodimers or heterodimers with other AP-1 family members to bind specific DNA response elements and control transcriptional activity. The biologic activity of c-Jun is regulated by phosphorylation events downstream of signaling pathways including c-Jun N-terminal kinase (JNK), mitogen-activated protein kinase (MAPK), cytokine signaling pathways, and growth factor-mediated signaling cascades. These regulatory mechanisms allow AP-1 complexes to rapidly coordinate transcriptional responses to changing cellular conditions.

As a major AP-1 transcription factor, JUN influences the expression of genes involved in cell-cycle progression, differentiation programs, cellular survival mechanisms, inflammatory responses, and tissue repair. The protein plays important roles during embryonic development, immune regulation, wound healing, regeneration, and cellular responses to environmental stress. Consequently, JUN has become a widely studied target in developmental biology, immunology, regenerative medicine, and signal transduction research.

Altered JUN expression or activation has been associated with cancer, chronic inflammation, neurodegenerative disease, fibrosis, and tissue injury. Because AP-1 signaling influences cellular proliferation, migration, differentiation, and survival, JUN is frequently investigated as a biomarker of pathway activation and transcriptional regulation. Researchers commonly evaluate JUN expression to better understand signaling networks that govern cellular adaptation, disease progression, and therapeutic response.

Beyond its role in stress-responsive signaling, JUN participates in transcriptional programs that coordinate tissue remodeling, cellular differentiation, and adaptive gene expression. AP-1 complexes function as important downstream effectors of growth factor signaling, inflammatory mediators, and environmental stimuli, allowing JUN to act as a molecular link between extracellular signals and transcriptional outcomes. These functions make JUN an important target for studies of cellular signaling and gene regulation.

JUN antibodies are commonly used in immunohistochemistry, western blotting, immunofluorescence, flow cytometry, and related protein detection applications. These reagents support investigations of AP-1 signaling, transcription factor biology, stress-response pathways, cellular differentiation, inflammation, regeneration, and cancer biology. JUN antibody tools help researchers characterize gene regulatory networks and signaling pathways that control cellular responses to developmental and environmental stimuli.

Learn more about c-Jun function in transcriptional regulation, AP-1 signaling, cellular stress responses, and gene expression control on our c-Jun Antibody page.

Application Notes

Optimal dilution of the JUN Antibody / AP-1 Transcription Factor Antibody should be determined by the researcher.

Immunogen

Amio acids PPHHLPQQMPVQHPR were used as the immunogen for the JUN / c-Jun antibody.

Storage

After reconstitution, the JUN / c-Jun antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.

Alternate Names

c-Jun Antibody, AP-1 Transcription Factor Antibody, Activator Protein 1 Antibody, Proto-Oncogene c-Jun Antibody, Stress Response Transcription Factor Antibody, Immediate Early Response Protein Antibody

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