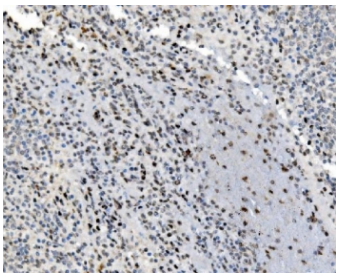
# Transcription Factor JunB Antibody / JUNB Polyclonal Antibody (RQ6565)

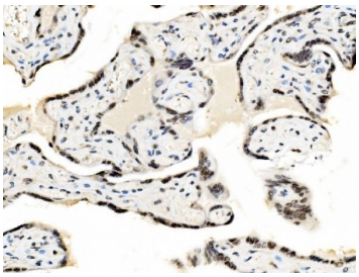
| Catalog No. | Formulation | Size |
|---|---|---|
| RQ6565 | 0.5mg/ml if reconstituted with 0.2ml sterile DI water | 100 ug |

**Bulk quote request**

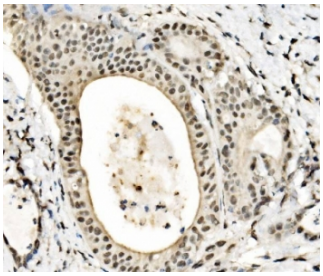
| | |
|---|---|
| **Availability** | 1-3 business days |
| **Species Reactivity** | Human, Mouse, Rat |
| **Format** | Antigen affinity purified |
| **Host** | Rabbit |
| **Clonality** | Polyclonal (rabbit origin) |
| **Isotype** | Rabbit IgG |
| **Purity** | Affinity purified |
| **Buffer** | Lyophilized from 1X PBS with 2% Trehalose |
| **UniProt** | P17275 |
| **Localization** | Nuclear |
| **Applications** | Western blot: 1-2ug/ml<br>Immunohistochemistry (FFPE): 2-5ug/ml<br>Immunofluorescence: 5ug/ml<br>Flow cytometry: 1-3ug/million cells |
| **Limitations** | This Transcription Factor JunB Antibody / JUNB Polyclonal Antibody for research use only. |



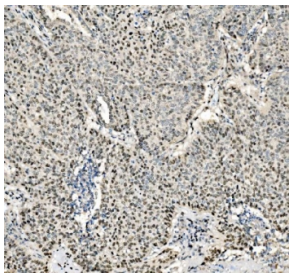
Transcription Factor JunB Antibody Shows Nuclear Staining in Human Spleen IHC. Immunohistochemistry staining of FFPE human spleen tissue with Transcription Factor JunB Antibody. HIER was performed by boiling tissue sections in pH 8 EDTA for 20 min followed by cooling before testing. The image shows widespread nuclear brown staining among cells throughout the splenic tissue, with variable staining intensity and comparatively little cytoplasmic signal. The predominantly nuclear distribution is consistent with the function of JunB as an AP-1 transcription factor and demonstrates tissue detection using this JUNB Polyclonal Antibody.



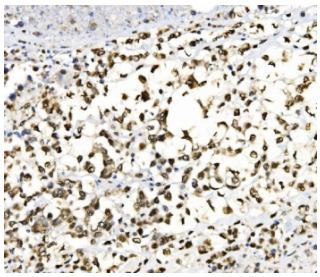
Transcription Factor JunB Antibody Highlights Placental Trophoblasts in Human Placenta IHC. Immunohistochemistry staining of FFPE human placental tissue with Transcription Factor JunB Antibody. HIER was performed by boiling tissue sections in pH 8 EDTA for 20 min followed by cooling before testing. Brown JUNB staining is present within cells lining the chorionic villi, with prominent nuclear labeling and comparatively weak signal in the villous stromal compartments. The distinct trophoblast-associated staining demonstrates tissue detection using this JUNB Polyclonal Antibody.



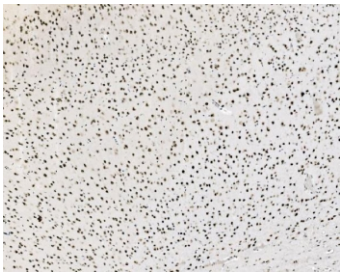
Transcription Factor JunB Antibody in Human Gall Bladder Adenosquamous Carcinoma IHC. Immunohistochemistry staining of FFPE human gall bladder adenosquamous carcinoma tissue with Transcription Factor JunB Antibody. HIER was performed by boiling tissue sections in pH 8 EDTA for 20 min followed by cooling before testing. The image shows prominent brown nuclear staining in the malignant epithelial cells surrounding a glandular lumen, with variable nuclear signal also present in adjacent cells. The predominantly nuclear pattern is consistent with the transcriptional function of JunB and demonstrates tumor tissue detection using this JUNB Polyclonal Antibody.



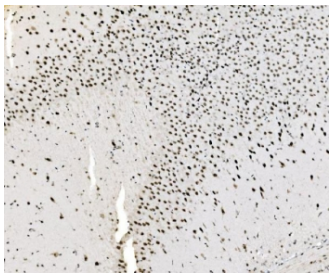
Transcription Factor JunB Antibody Shows Nuclear Labeling in Human Lung Cancer IHC. Immunohistochemistry staining of FFPE human lung cancer tissue with Transcription Factor JunB Antibody. HIER was performed by boiling tissue sections in pH 8 EDTA for 20 min followed by cooling before testing. Numerous tumor cells exhibit brown nuclear JUNB staining distributed throughout the malignant tissue, with heterogeneous signal intensity across the field and relatively limited cytoplasmic staining. The predominantly nuclear pattern is consistent with JunB's role as an AP-1 transcription factor and demonstrates tumor tissue detection using this JUNB Polyclonal Antibody.



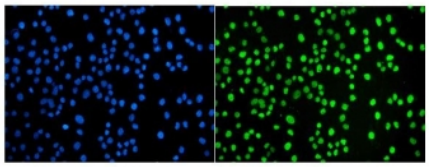
Transcription Factor JunB Antibody in Human Pancreatic Cancer IHC. Immunohistochemistry staining of FFPE human pancreatic cancer tissue with Transcription Factor JunB Antibody. HIER was performed by boiling tissue sections in pH 8 EDTA for 20 min followed by cooling before testing. The image shows widespread brown staining among the malignant epithelial cells, with prominent nuclear labeling accompanied by some cytoplasmic signal. Staining intensity varies across the tumor population, while intervening stromal areas show comparatively less labeling. The prominent nuclear component is consistent with JunB localization as an AP-1 transcription factor and demonstrates tissue detection using this JUNB Polyclonal Antibody.



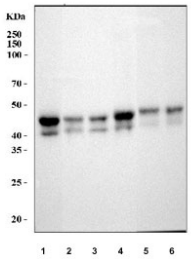
Transcription Factor JunB Antibody Shows Widespread Nuclear Staining in Mouse Brain IHC. Immunohistochemistry staining of FFPE mouse brain tissue with Transcription Factor JunB Antibody. HIER was performed by boiling tissue sections in pH 8 EDTA for 20 min followed by cooling before testing. Numerous nuclei throughout the field display brown JUNB labeling, producing a widespread punctate nuclear staining pattern with comparatively little diffuse cytoplasmic signal. The result demonstrates recognition of endogenous mouse JunB and supports the cross-species utility of this JUNB Polyclonal Antibody.



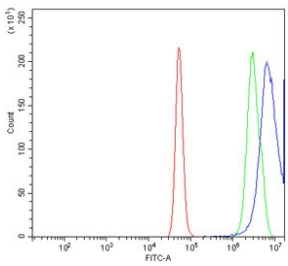
Transcription Factor JunB Antibody Demonstrates Nuclear Staining in Rat Brain IHC. Immunohistochemistry staining of FFPE rat brain tissue with Transcription Factor JunB Antibody. HIER was performed by boiling tissue sections in pH 8 EDTA for 20 min followed by cooling before testing. Numerous nuclei show strong, discrete brown labeling, with differences in the density of positive cells across the brain tissue and comparatively little diffuse cytoplasmic staining. The nuclear distribution supports detection of endogenous rat JunB and demonstrates cross-species reactivity of this JUNB Polyclonal Antibody.



Transcription Factor JunB Antibody Shows Nuclear Localization in SiHa Cervical Cancer Cells IF. Immunofluorescence staining of FFPE human SiHa cervical cancer cells with Transcription Factor JunB Antibody (green) and DAPI nuclear stain (blue). HIER was performed by steaming in pH 6 citrate buffer for 20 min. Comparison of the DAPI and antibody panels shows strong green JUNB signal corresponding closely with the nuclei across the cell population, with comparatively little extranuclear fluorescence. The predominantly nuclear distribution is consistent with the transcriptional role of JunB and demonstrates cellular detection using this JUNB Polyclonal Antibody.




Transcription Factor JunB Antibody Western Blot of Multiple Human Cell Lines. Western blot testing of human HeLa (lane 1), K562 (lane 2), Caco-2 (lane 3), A549 (lane 4), HT1080 (lane 5), and A431 (lane 6) cell lysates with Transcription Factor JunB Antibody. JUNB-reactive bands are detected at approximately 40-45 kDa across all six lysates, with differences in signal intensity between samples and particularly strong signal in A549 cells. The migration is consistent with phosphorylated JUNB, which can appear above the approximately 36-39 kDa non-phosphorylated protein. This multi-cell-line western blot supports detection with the JUNB Polyclonal Antibody.




Transcription Factor JunB Antibody in Human A431 Epidermoid Carcinoma Cells FACS. Flow cytometry analysis of human A431 epidermoid carcinoma cells stained with Transcription Factor JunB Antibody at 1 ug/million cells following blocking with goat serum. Cells alone are shown in red, the isotype control in green, and JUNB antibody staining in blue. The JUNB-stained population displays a clear rightward fluorescence shift relative to both controls, supporting detection of endogenous JUNB in A431 cells using this JUNB Polyclonal Antibody.

## Description

Transcription Factor JunB Antibody / JUNB Polyclonal Antibody recognizes JunB, a basic leucine zipper transcription factor encoded by the JUNB gene. JunB is a member of the JUN protein family, which also includes c-Jun and JunD, and functions as a component of activator protein-1 (AP-1) transcription factor complexes. AP-1 integrates diverse extracellular and intracellular signals to regulate gene-expression programs associated with proliferation, differentiation, survival, inflammation, and cellular stress responses.

JunB contains a C-terminal basic DNA-binding region adjacent to a leucine zipper domain that mediates protein dimerization. Through these structural elements, JunB can form homodimers or heterodimers with other JUN proteins and members of the FOS family. The resulting AP-1 complexes recognize specific regulatory DNA sequences and influence transcription of target genes. Complex composition is an important determinant of AP-1 activity because individual JUN and FOS family members can exert distinct effects depending on cellular context.

JUNB is classified as an immediate-early response gene and can be rapidly induced by growth factors, cytokines, cellular stress, and other stimuli. Its biological activity is controlled at several levels, including transcription, protein stability, post-translational modification, and selection of dimerization partners. A Transcription Factor JunB Antibody can therefore be

useful for investigating changes in JunB abundance as part of dynamic AP-1 signaling responses.

JunB contributes to the regulation of cell proliferation and differentiation and has been investigated in immune function, hematopoiesis, bone biology, tissue remodeling, and development. Altered JUNB expression or regulation has also been studied in cancer and other pathological conditions involving disrupted growth or differentiation. Importantly, JunB should not simply be treated as an interchangeable substitute for c-Jun. Although JUN family proteins share related DNA-binding and dimerization properties, differences in their regulatory regions, expression patterns, and interacting partners can produce distinct biological effects.

Analysis of JunB can consequently complement studies of other AP-1 components and help distinguish changes in individual transcription factor family members from broader alterations in AP-1 signaling. The relationship between JUNB expression, cellular stimulation, and differentiation state makes the protein relevant to studies spanning signal transduction and transcriptional regulation.

A Transcription Factor JunB Antibody provides a reagent for investigating JunB expression and its contribution to AP-1-dependent transcription, while a JUNB Polyclonal Antibody provides gene-based terminology for research examining cellular signaling, differentiation, and transcriptional responses.

For a monoclonal alternative targeting this protein, see our JUNB Antibody PCRP-JUNB-3G2 / JunB Monoclonal Antibody page.

## Application Notes

Optimal dilution of the Transcription Factor JunB Antibody / JUNB Polyclonal Antibody should be determined by the researcher.

## Immunogen

Amino acids HDYKLLKPSLAVNLADPY from the human protein were used as the immunogen for the Transcription Factor JunB Antibody.

## Storage

After reconstitution, the Transcription Factor JunB 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

JUNB antibody, JunB antibody, JunB Proto-Oncogene antibody, AP-1 Subunit JunB antibody, Transcription Factor AP-1 Subunit JunB antibody


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