

For Research Use Only

# JUN Recombinant monoclonal antibody, PBS Only

Catalog Number: 81667-5-PBS



## Basic Information

|                                                             |                                              |                                                       |
|-------------------------------------------------------------|----------------------------------------------|-------------------------------------------------------|
| <b>Catalog Number:</b><br>81667-5-PBS                       | <b>GenBank Accession Number:</b><br>BC068522 | <b>Purification Method:</b><br>Protein A purification |
| <b>Size:</b><br>100ug , Concentration: 1 mg/ml by Nanodrop; | <b>GeneID (NCBI):</b><br>3725                | <b>CloneNo.:</b><br>252300C1                          |
| <b>Source:</b><br>Rabbit                                    | <b>UNIPROT ID:</b><br>P05412                 |                                                       |
| <b>Isotype:</b><br>IgG                                      | <b>Full Name:</b><br>jun oncogene            |                                                       |
| <b>Immunogen Catalog Number:</b><br>AG17304                 | <b>Calculated MW:</b><br>331 aa, 36 kDa      |                                                       |
|                                                             | <b>Observed MW:</b><br>40-45 kDa             |                                                       |

## Applications

**Tested Applications:**  
WB, IHC, IF/ICC, Indirect ELISA

**Species Specificity:**  
human, mouse, rat

## Background Information

JUN is also named as c-Jun and AP1, belongs to the bZIP family and Jun subfamily. JUN, the most extensively studied protein of the activator protein-1 (AP-1) complex, is involved in numerous cell activities, such as proliferation, apoptosis, survival, tumorigenesis and tissue morphogenesis (PMID: 22180088). JUN is a transcription factor that recognizes and binds to the enhancer heptamer motif 5'-TGA[CG]TCA-3'. It promotes activity of NR5A1 when phosphorylated by HIPK3 leading to increased steroidogenic gene expression upon cAMP signaling pathway stimulation. JUN is a basic leucine zipper (bZIP) transcription factor that acts as homo- or heterodimer, binding to DNA and regulating gene transcription (PMID: 9732876). In addition, extracellular signals can induce post-translational modifications of JUN, resulting in altered transcriptional activity and target gene expression (PMID:8464713). More over, it has uncovered multiple layers of a complex regulatory scheme in which JUN is able to crosstalk, amplify and integrate different signals for tissue development and disease. Jun is predominantly nuclear, ubiquitinated Jun colocalizes with lysosomal proteins (PMID: 15469925).

## Storage

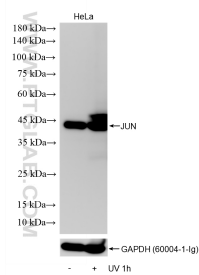
**Storage:**  
Store at -80°C.

**Storage Buffer:**  
PBS only, pH7.3

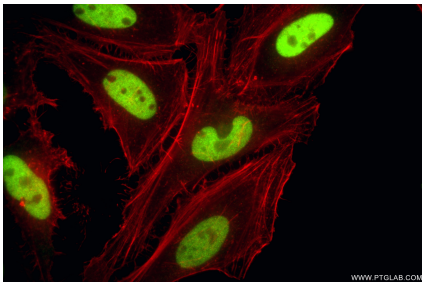
For technical support and original validation data for this product please contact:  
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)  
E: [proteintech@ptglab.com](mailto:proteintech@ptglab.com)  
W: [ptglab.com](http://ptglab.com)

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

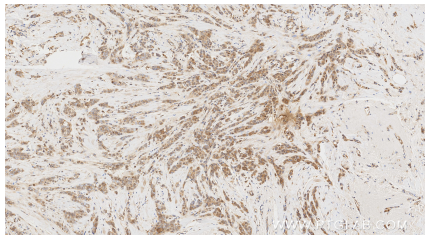
## Selected Validation Data



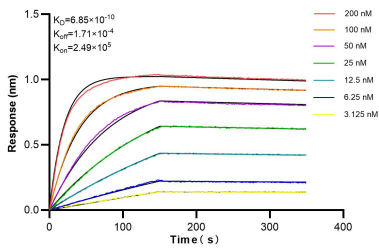
Untreated and UV treated HeLa lysates were subjected to SDS PAGE followed by western blot with 81667-5-RR (JUN antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 81667-5-PBS in a different storage buffer formulation.



Immunofluorescent analysis of (4% PFA) fixed HeLa cells using JUN antibody (81667-5-RR, Clone: 252300C1 ) at dilution of 1:1000 and CoraLite® 488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2), CL594-Phalloidin (red). This data was developed using the same antibody clone with 81667-5-PBS in a different storage buffer formulation.



Immunohistochemical analysis of paraffin-embedded human breast cancer tissue slide using 81667-5-RR (JUN antibody) at dilution of 1:500 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 81667-5-PBS in a different storage buffer formulation.



Biolayer interferometry (BLI) kinetic assays of 81667-5-RR against Human JUN were performed. The affinity constant is 0.685 nM.