

For Research Use Only

Phospho-JUN (Ser73) Recombinant antibody

Catalog Number: 80086-1-RR

6 Publications



Basic Information

Catalog Number:

80086-1-RR

Size:

100ul, Concentration: 1000 ug/ml by Nanodrop;

Source:

Rabbit

Isotype:

IgG

GenBank Accession Number:

BC068522

GeneID (NCBI):

3725

UNIPROT ID:

P05412

Full Name:

jun oncogene

Calculated MW:

331 aa, 36 kDa

Observed MW:

42-45 kDa

Purification Method:

Protein A purification

CloneNo.:

4A18

Recommended Dilutions:

WB: 1:2000-1:10000

IF/ICC: 1:250-1:1000

FC (Intra): 0.13 ug per 10⁶ cells in a 100 µl suspension

ChIP-qPCR: 1:10-1:100

Applications

Tested Applications:

WB, IF/ICC, FC (Intra), ELISA, ChIP-qPCR

Cited Applications:

WB, IHC

Species Specificity:

human, mouse

Cited Species:

human, mouse, rat

Positive Controls:

WB: UV treated NIH/3T3 cells,

IF/ICC: UV (1 hour) and 100 nM Calyculin A (30 minutes) HeLa cells,

FC (Intra): UV treated NIH/3T3 cells,

ChIP-qPCR: hβ-NGF (starved overnight) (50 ng/ml, 2 h) PC-12 cells,

Background Information

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). This antibody is raised against synthetic phosphopeptide corresponding to residues surrounding Ser73 of human JUN, which can detect the bands around 42-45 kDa.

Notable Publications

Author	Pubmed ID	Journal	Application
Kaipeng Jin	39954838	Chem Biol Interact	WB,IHC
Mufeng Li	39862636	Int Immunopharmacol	WB,IHC
Jing Liu	39657505	Biomed Pharmacother	WB

Storage

Storage:

Store at -20°C. Stable for one year after shipment.

Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol, pH7.3

Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

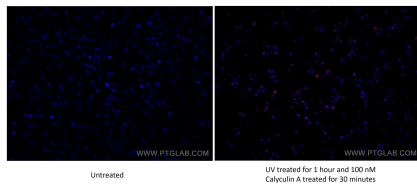
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

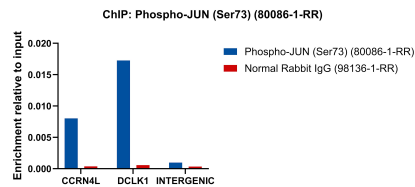
E: proteintech@ptglab.com
W: ptglab.com

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

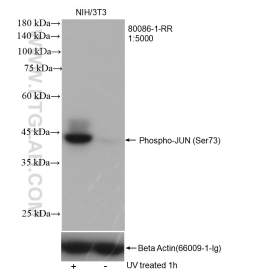
Selected Validation Data



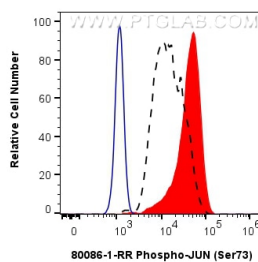
Immunofluorescent analysis of (4% PFA) fixed untreated A549 cells, UV (1 hour) and 100 nM Calyculin A (30 minutes) treated HeLa cells using Phospho-JUN (Ser73) antibody (80086-1-RR, Clone: 4A18) at dilution of 1:500 and Multi-rAb CoraLite® Plus 594-Goat Anti-Rabbit Recombinant Secondary Antibody (H+L) (Cat.NO. RGAR004).



Chromatin was prepared from PC-12 cells starved overnight and treated with β -NGF (50 ng/ml) for 2 h. Cells were fixed with formaldehyde for 10 minutes. The ChIP was performed with 20 μ g of cross-linked chromatin, 5 μ g of Phospho-JUN (Ser73) (80086-1-RR) or 5 μ g of Normal Rabbit IgG (98136-1-RR), and 20 μ l of Protein A Magarose Beads. The immunoprecipitated DNA was quantified by real-time PCR.



Non-treated and UV treated NIH/3T3 cells were subjected to SDS PAGE followed by western blot with 80086-1-RR (Phospho-JUN (Ser73) antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours. The membrane was stripped and re-blotted with Beta Actin antibody (66009-1-Ig) as loading control.



1x10⁶ NIH/3T3 cells untreated (dashed lines) or treated with UV which intracellularly stained with 0.13 μ g Phospho-JUN (Ser73) Recombinant antibody (80086-1-RR, Clone:4A18) and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2)(red), or 0.13 μ g Rabbit IgG Isotype Control Recombinant Antibody (98136-1-RR, Clone: 240953C9) (blue). Cells were fixed with 4% PFA and permeabilized with 90% MeOH.