

# Rabbit Anti-phospho-c-Jun (Ser63) antibody

# SL3210R

Product Name:	phospho-c-Jun (Ser63)
Chinese Name:	磷酸化原癌基因c-Jun抗体
Alias:	c-Jun (phospho S63); c-Jun (phospho Ser63); p-c-Jun (Ser63); Transcription factor AP-1; Jun oncogene; JUN; AP 1; AP1; AP-1; Enhancer Binding Protein AP1; Jun Activation Domain Binding Protein; JUN protein; JUNC; p39; Proto oncogene cJun; Transcription Factor AP1; V jun avian sarcoma virus 17 oncogene homolog; vJun Avian Sarcoma Virus 17 Oncogene Homolog; JUN_HUMAN; Activator 1; Proto-oncogene c-Jun; V-jun avian sarcoma virus 17 oncogene homolog.
Organism Species:	Rabbit
Clonality:	Polyclonal
<b>React Species:</b>	Human, Mouse, Rat, Dog, Pig, Cow, Rabbit, Sheep,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800Flow-Cyt=0.2µg /TestIF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	43kDa
Cellular localization:	The nucleus
Form:	Lyophilized or Liquid
Concentration:	lmg/ml
immunogen:	KLH conjugated Synthesised phosphopeptide derived from human c-Jun around the phosphorylation site of Ser63:LT(p-S)PD
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20 °C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	<u>PubMed</u>

The human protooncogene JUN is the putative transforming gene of avian sarcoma virus 17, and it encodes a protein which is highly homologous to the viral protein. cJun (previously known as the Fos binding protein p39) and c Fos form a complex in the nucleus. AP 1 (activating protein 1) is a collective term referring to these dimeric transcription factors composed of Jun, Fos or ATF subunits that bind to a common DNA site, the AP1 binding site. AP 1 proteins, mostly the Jun group, regulate the expression and function of cell cycle regulators such as Cyclin D1, p53, p21 (cip1/waf1), p19 (ARF) and p16. Fos and Jun proto oncogene expression is induced transiently by a variety of extracellular stimuli associated with mitogenesis, differentiation processes or depolarization of neurons. JUN has been mapped to 1p32 to p31, a chromosomal region involved in both translocations and deletions in human malignancies.

#### Function:

Transcription factor that recognizes and binds to the enhancer heptamer motif 5'-TGA[CG]TCA-3'. Promotes activity of NR5A1 when phosphorylated by HIPK3 leading to increased steroidogenic gene expression upon cAMP signaling pathway stimulation.

#### Subunit:

Heterodimer with either FOS or BATF3 or ATF7. The ATF7/JUN heterodimer is essential for ATF7 transactivation activity. Interacts with DSIPI; the interaction inhibits the binding of active AP1 to its target DNA (By similarity). Interacts with HIVEP3 and MYBBP1A (By similarity). Interacts with SP1, SPIB and TCF20. Interacts with COPS5; the interaction leads indirectly to its phosphorylation. Component of the SMAD3/SMAD4/JUN/FOS/complex which forms at the AP1 promoter site. The SMAD3/SMAD4 heterodimer acts syngernistically with the JUN/FOS heterodimer to activate transcription in response to TGF-beta. Interacts (via its basic DNA binding and leucine zipper domains) with SMAD3 (via an N-terminal domain); the interaction is required for TGF-beta-mediated transactivation of the SMAD3/SMAD4/JUN/FOS/complex. Interacts with RNF187. Binds to HIPK3.

#### **Subcellular Location:**

Nucleus.

#### Post-translational modifications:

Phosphorylated by CaMK4 and PRKDC; phosphorylation enhances the transcriptional activity. Phosphorylated by HIPK3. Phosphorylated by DYRK2 at Ser-243; this primes the protein for subsequent phosphorylation by GSK3B at Thr-239. Phosphorylated at Thr-239, Ser-243 and Ser-249 by GSK3B; phosphorylation reduces its ability to bind DNA. Phosphorylated by PAK2 at Thr-2, Thr-8, Thr-89, Thr-93 and Thr-286 thereby promoting JUN-mediated cell proliferation and transformation. Phosphorylated by PLK3 following hypoxia or UV irradiation, leading to increase DNA-binding activity. Acetylated at Lys-271 by EP300.

#### Similarity:

Belongs to the bZIP family. Jun subfamily. Contains 1 bZIP (basic-leucine zipper) domain.

#### Product Detail:

SWISS: P05412

**Gene ID:** 3725

#### Database links:

Entrez Gene: 3725Human

Entrez Gene: 16476 Mouse

Entrez Gene: 396913Pig

Entrez Gene: 24516Rat

Omim: 165160Human

SwissProt: P05412Human

SwissProt: P05627Mouse

SwissProt: P56432Pig

SwissProt: P17325Rat

Unigene: 525704Human

Unigene: 696684Human

Unigene: 275071 Mouse

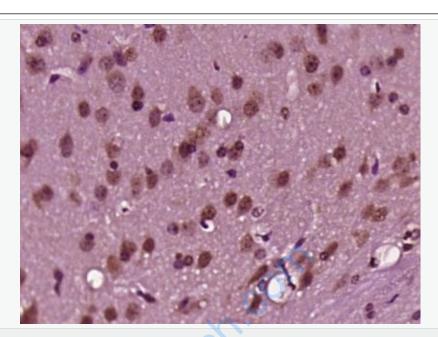
Unigene: 93714Rat

### **Important Note:**

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

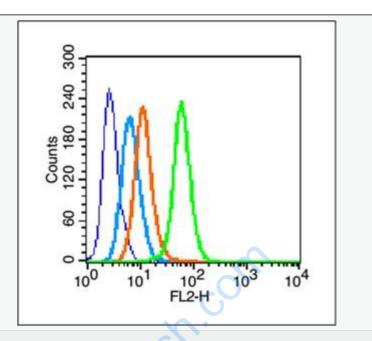
C-jun(Oncoprotein C-jun: active protein

1)基因与鸟类肉瘤病毒17的转化基因具有同源性,是早期应答基因家族成员之一。 主要用于各种恶性Tumour的研究。C-jun又称:应激活化蛋白激酶.



## Picture:

Paraformaldehyde-fixed, paraffin embedded (Mouse brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (phospho-c-Jun (Ser63)) Polyclonal Antibody, Unconjugated (SL3210R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.



Blank control (blue line): HepG2 (fixed with 70% methanol (Overnight at 4°C) and then permeabilized with 90% ice-cold methanol for 20 min at -20°C).

Primary Antibody (green line): Rabbit Anti-phospho-c-Jun (Ser63)antibody (SL3210R),Dilution: 0.2µg/10^6 cells;

Isotype Control Antibody (orange line): Rabbit IgG.

Secondary Antibody (white blue line): Goat anti-rabbit IgG-PE, Dilution: 1µg /test.