

JUN Recombinant monoclonal antibody

Catalog Number: 81667-5-RR

Basic Information

Catalog Number: 81667-5-RR	GenBank Accession Number: BC068522	Purification Method: Protein A purification
Source: Rabbit	GeneID (NCBI): 3725	CloneNo.: 252300C1
Isotype: IgG	UNIPROT ID: P05412	Recommended Dilutions:
Immunogen Catalog Number: AG17304	Full Name: jun oncogene	WB: 1:5000-1:50000
	Calculated MW: 331 aa, 36 kDa	IHC: 1:250-1:1000
	Observed MW: 40-45 kDa	IF/ICC: 1:500-1:2000

Applications

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

Species Specificity:
human, mouse, rat

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0

Positive Controls:

WB: UV treated HeLa cells, NIH/3T3 cells, C6 cells

IHC: human breast cancer tissue,

IF/ICC: HeLa cells,

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:

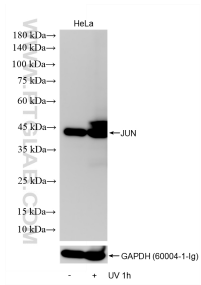
Store at -20°C. Stable for one year after shipment.

Storage Buffer:

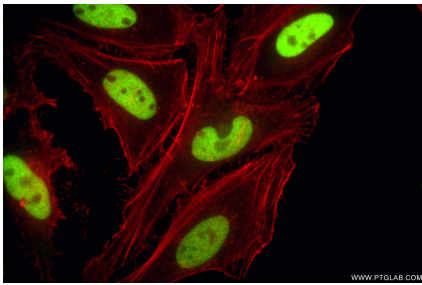
PBS with 0.02% sodium azide and 50% glycerol, pH7.3

Aliquoting is unnecessary for -20°C storage

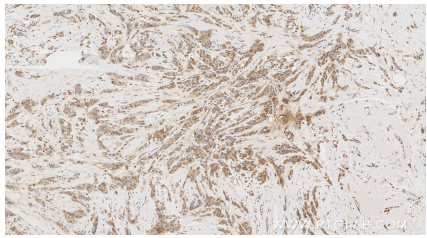
Selected Validation Data



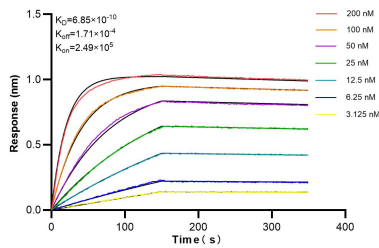
Untreated and UV treated HeLa lysates were subjected to SDS PAGE followed by western blot with 81667-5-RR (JUN antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours.



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).



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).



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