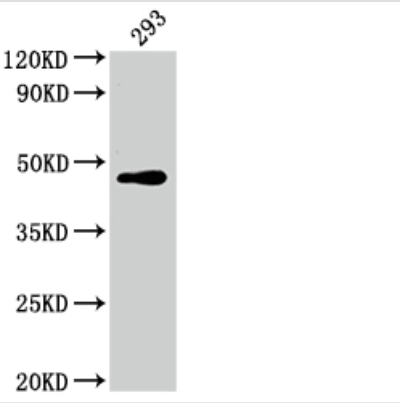
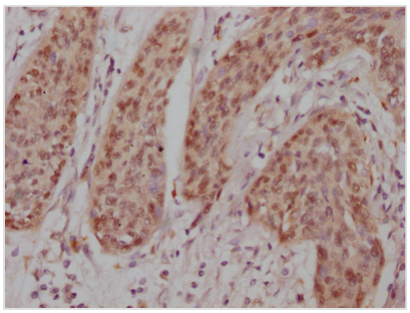
JUN Recombinant Monoclonal Antibody

Product Code	CSB-RA911286A0HU
Storage	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.
Uniprot No.	P05412
Immunogen	A synthesized peptide derived from human c-Jun
Species Reactivity	Human
Tested Applications	ELISA, WB, IHC; Recommended dilution: WB:1:500-1:5000, IHC:1:50-1:200
Relevance	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. Involved in activated KRAS-mediated transcriptional activation of USP28 in colorectal cancer (CRC) cells (PubMed:24623306). Binds to the USP28 promoter in colorectal cancer (CRC) cells (PubMed:24623306).
Form	Liquid
Conjugate	Non-conjugated
Storage Buffer	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Purification Method	Affinity-chromatography
Isotype	Rabbit IgG
Clonality	Monoclonal
Product Type	Recombinant Antibody
Immunogen Species	Homo sapiens (Human)
Research Area	Epigenetics and Nuclear Signaling; Cancer; Immunology; Signal transduction
Gene Names	JUN
Clone No.	10D4

Image



Western Blot
Positive WB detected in: 293 whole cell lysate
All lanes: JUN antibody at 1:2000
Secondary
Goat polyclonal to rabbit IgG at 1/50000 dilution
Predicted band size: 36 kDa
Observed band size: 43 kDa



IHC image of CSB-RA911286A0HU diluted at 1:100 and staining in paraffin-embedded human cervical cancer performed on a Leica BondTM system. After dewaxing and hydration, antigen retrieval was mediated by high pressure in a citrate buffer (pH 6.0). Section was blocked with 10% normal goat serum 30min at RT. Then primary antibody (1% BSA) was incubated at 4? overnight. The primary is detected by a Goat anti-rabbit IgG polymer labeled by HRP and visualized using 0.05% DAB.

Description

The JUN recombinant monoclonal antibody is prepared using a combination of protein technology and DNA recombinant technology. The process starts by immunizing mice with a synthesized peptide from human c-Jun, followed by extraction of spleen cells' RNA under aseptic conditions. The cDNA synthesized by RNA reverse transcription is then used as a template for PCR amplification of the JUN antibody gene. The obtained JUN antibody gene is inserted into a vector and transfected into host cells for culture. The JUN recombinant monoclonal antibody is then purified from the supernatant of the cell culture through affinity chromatography. Rigorous verification of this antibody is conducted to ensure its accuracy, and it can be utilized for detecting human JUN protein in ELISA, WB, and IHC experiments.

The JUN protein is a transcription factor that plays a crucial role in regulating gene expression in response to a variety of signals, including growth factors, cytokines, and stress. It forms homodimers or heterodimers with other transcription factors, such as FOS, to bind to specific DNA sequences known as AP-1 sites in the promoter regions of target genes. Once bound, JUN can either activate or repress the transcription of these genes, depending on the context and the presence of other cofactors. JUN-regulated genes are involved in a wide range of biological processes, including cell proliferation, differentiation, apoptosis, and inflammation.