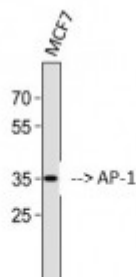


Anti-AP-1 antibody



Western Blot (WB) analysis of 1. MCF7 using AP-1 Polyclonal Antibody. (STJ91616)



Description

AP-1 is a protein encoded by the JUN gene which is approximately 35,6 kDa. AP-1 is localised to the nucleus. It is involved in activated TLR4 signalling, the IL-2 pathway, toll-like receptor signalling pathways, development HGF signalling pathway and TNFR1 pathway. It interacts directly with specific target DNA sequences to regulate gene expression. It promotes activity of NR5A1 when phosphorylated by HIPK3, leading to increased steroidogenic gene expression upon cAMP signalling pathway stimulation. AP-1 is expressed in the nervous system, pancreas, lung, intestine and muscle. Mutations in the JUN gene may result in brain sarcoma and campylobacteriosis. STJ91616 was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen. This polyclonal antibody detects endogenous levels of AP-1 protein only when phosphorylated at S63.

Model	STJ91616
Host	Rabbit
Reactivity	Human, Mouse, Rat
Applications	ELISA, IHC, IP, WB
Immunogen	Synthesized peptide derived from human AP-1 around the non-phosphorylation site of T91.
Immunogen Region	30-110 aa
Gene ID	3725
Gene Symbol	JUN
Dilution range	WB 1:500-1:2000IHC 1:100-1:300IP 1:200-500ELISA 1:20000

Specificity	AP-1 Polyclonal Antibody detects endogenous levels of AP-1 protein.
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Note	For Research Use Only (RUO).
Protein Name	Transcription factor AP-1 Activator protein 1 AP1 Proto-oncogene c-Jun V-jun avian sarcoma virus 17 oncogene homolog p39
Molecular Weight	48 kDa
Clonality	Polyclonal
Conjugation	Unconjugated
Isotype	IgG
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Concentration	1 mg/ml
Storage Instruction	Store at -20°C, and avoid repeat freeze-thaw cycles.
Database Links	HGNC:6204OMIM:165160
Alternative Names	Transcription factor AP-1 Activator protein 1 AP1 Proto-oncogene c-Jun V-jun avian sarcoma virus 17 oncogene homolog p39
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. Involved in activated KRAS-mediated transcriptional activation of USP28 in colorectal cancer (CRC) cells . Binds to the USP28 promoter in colorectal cancer (CRC) cells .
Cellular Localization	Nucleus.
Post-translational Modifications	Ubiquitinated by the SCF(FBXW7), leading to its degradation. Ubiquitination takes place following phosphorylation, that promotes interaction with FBXW7. 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.