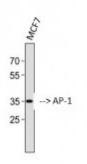


Anti-AP-1 antibody



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 <u>3725</u>

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.

The antibody was affinity-purified from rabbit antiserum by affinity-**Purification**

chromatography using epitope-specific immunogen.

Note For Research Use Only (RUO).

Transcription factor AP-1 Activator protein 1 AP1 Proto-oncogene c-Jun V-**Protein Name**

jun avian sarcoma virus 17 oncogene homolog p39

48 kDa Molecular Weight

Clonality Polyclonal

Unconjugated Conjugation

IgG **Isotype**

Formulation Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Concentration 1 mg/ml

Store at -20°C, and avoid repeat freeze-thaw cycles. **Storage Instruction**

HGNC:6204OMIM:165160 **Database Links**

Transcription factor AP-1 Activator protein 1 AP1 Proto-oncogene c-Jun V-**Alternative Names**

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.

Ubiquitinated by the SCF(FBXW7), leading to its degradation. Ubiquitination **Post-translational Modifications**

takes place following phosphorylation, that promotes interaction with

following hypoxia or UV irradiation, leading to increase DNA-binding

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 JUNmediated cell proliferation and transformation. Phosphorylated by PLK3

activity. Acetylated at Lys-271 by EP300.