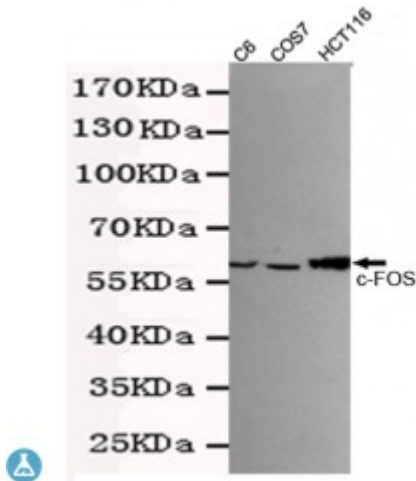


## Anti-c-Fos antibody



<b>Description</b>	Mouse monoclonal to c-Fos.
<b>Model</b>	STJ99211
<b>Host</b>	Mouse
<b>Reactivity</b>	Human, Rat, Simian
<b>Applications</b>	ELISA, WB
<b>Immunogen</b>	Purified recombinant human FOS protein fragments expressed in E.coli.
<b>Gene ID</b>	<a href="#">2353</a>
<b>Gene Symbol</b>	<a href="#">FOS</a>
<b>Dilution range</b>	WB 1:500-2000ELISA 1:10000-20000
<b>Specificity</b>	This antibody detects endogenous levels of c-Fos and does not cross-react with related proteins.
<b>Purification</b>	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
<b>Clone ID</b>	7D6-A9-D4
<b>Note</b>	For Research Use Only (RUO).
<b>Protein Name</b>	Proto-oncogene c-Fos Cellular oncogene fos G0/G1 switch regulatory protein 7
<b>Molecular Weight</b>	62kDa
<b>Clonality</b>	Monoclonal
<b>Conjugation</b>	Unconjugated

<b>Isotype</b>	IgG1
<b>Formulation</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
<b>Concentration</b>	1 mg/ml
<b>Storage Instruction</b>	Store at -20°C, and avoid repeat freeze-thaw cycles.
<b>Database Links</b>	<a href="https://www.ncbi.nlm.nih.gov/condensedcode/HGNC:3796OMIM:164810">HGNC:3796OMIM:164810</a>
<b>Alternative Names</b>	Proto-oncogene c-Fos Cellular oncogene fos G0/G1 switch regulatory protein 7
<b>Function</b>	Nuclear phosphoprotein which forms a tight but non-covalently linked complex with the JUN/AP-1 transcription factor. In the heterodimer, FOS and JUN/AP-1 basic regions each seems to interact with symmetrical DNA half sites. On TGF-beta activation, forms a multimeric SMAD3/SMAD4/JUN/FOS complex at the AP1/SMAD-binding site to regulate TGF-beta-mediated signaling. Has a critical function in regulating the development of cells destined to form and maintain the skeleton. It is thought to have an important role in signal transduction, cell proliferation and differentiation. In growing cells, activates phospholipid synthesis, possibly by activating CDS1 and PI4K2A. This activity requires Tyr-dephosphorylation and association with the endoplasmic reticulum.
<b>Cellular Localization</b>	Nucleus. Endoplasmic reticulum. Cytoplasm, cytosol. In quiescent cells, present in very small amounts in the cytosol. Following induction of cell growth, first localizes to the endoplasmic reticulum and only later to the nucleus. Localization at the endoplasmic reticulum requires dephosphorylation at Tyr-10 and Tyr-30.
<b>Post-translational Modifications</b>	Phosphorylated in the C-terminal upon stimulation by nerve growth factor (NGF) and epidermal growth factor (EGF). Phosphorylated, in vitro, by MAPK and RSK1. Phosphorylation on both Ser-362 and Ser-374 by MAPK1/2 and RSK1/2 leads to protein stabilization with phosphorylation on Ser-374 being the major site for protein stabilization on NGF stimulation. Phosphorylation on Ser-362 and Ser-374 primes further phosphorylations on Thr-325 and Thr-331 through promoting docking of MAPK to the DEF domain. Phosphorylation on Thr-232, induced by HA-RAS, activates the transcriptional activity and antagonizes sumoylation. Phosphorylation on Ser-362 by RSK2 in osteoblasts contributes to osteoblast transformation . Constitutively sumoylated with SUMO1, SUMO2 and SUMO3. Desumoylated by SENP2. Sumoylation requires heterodimerization with JUN and is enhanced by mitogen stimulation. Sumoylation inhibits the AP-1 transcriptional activity and is, itself, inhibited by Ras-activated phosphorylation on Thr-232. In quiescent cells, the small amount of FOS present is phosphorylated at Tyr-10 and Tyr-30 by SRC. This Tyr-phosphorylated form is cytosolic. In growing cells, dephosphorylated by PTPN2. Dephosphorylation leads to the association with endoplasmic reticulum membranes and activation of phospholipid synthesis.