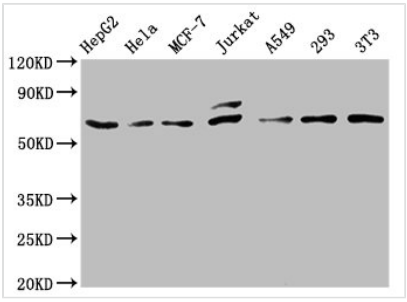
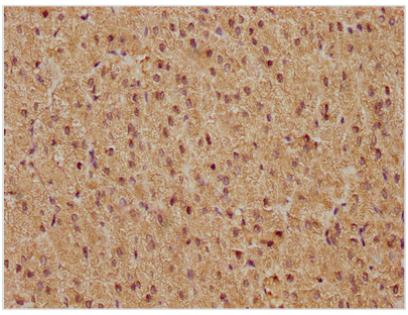
FOS Antibody

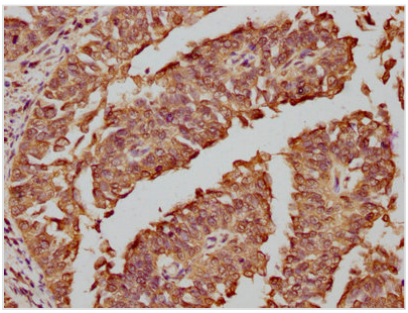
Product Code	CSB-RA008790A0HU
Abbreviation	Proto-oncogene c-Fos
Storage	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.
Uniprot No.	P01100
Immunogen	A synthesized peptide derived from human FOS
Species Reactivity	Human, Mouse
Tested Applications	ELISA, WB, IHC, IF, FC; Recommended dilution: WB:1:500-1:5000, IHC:1:50-1:200, IF:1:20-1:200
Relevance	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.
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
Alias	Proto-oncogene c-Fos, Cellular oncogene fos, G0/G1 switch regulatory protein 7, FOS, G0S7
Immunogen Species	Homo sapiens (Human)
Research Area	Neuroscience
Gene Names	FOS
Accession NO.	14C10
Image	



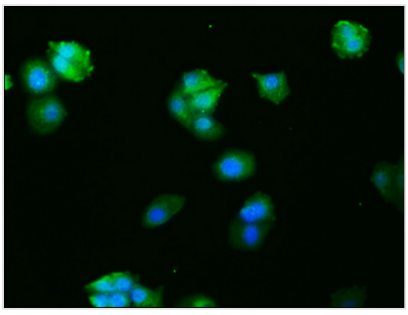
Western Blot
Positive WB detected in: HepG2 whole cell lysate, Hela whole cell lysate, MCF-7 whole cell lysate, Jurkat whole cell lysate, A549 whole cell lysate, 293 whole cell lysate, NIH/3T3 whole cell lysate
All lanes: c-FOS antibody at 0.81μg/ml
Secondary
Goat polyclonal to rabbit IgG at 1/50000 dilution
Predicted band size: 41, 29, 37 KDa
Observed band size: 62 KDa



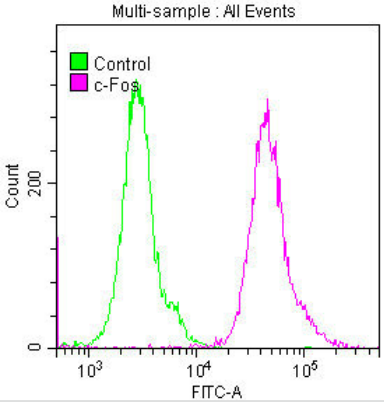
IHC image of CSB-RA008790A0HU diluted at 1:81 and staining in paraffin-embedded human adrenal gland tissue performed on a Leica BondTM system. After dewaxing and hydration, antigen retrieval was mediated by high pressure in a citrate buffer (pH 6.0). Section was blocked with 10% normal goat serum 30min at RT. Then primary antibody (1% BSA) was incubated at 4°C overnight. The primary is detected by a biotinylated secondary antibody and visualized using an HRP conjugated SP system.



IHC image of CSB-RA008790A0HU diluted at 1:81 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°C overnight. The primary is detected by a biotinylated secondary antibody and visualized using an HRP conjugated SP system.



Immunofluorescence staining of HepG2 cells with CSB-RA008790A0HU at 1:27, counter-stained with DAPI. The cells were fixed in 4% formaldehyde, permeabilized using 0.2% Triton X-100 and blocked in 10% normal Goat Serum. The cells were then incubated with the antibody overnight at 4°C. The secondary antibody was Alexa Fluor 488-congugated AffiniPure Goat Anti-Rabbit IgG (H+L).



Overlay histogram showing Hela cells stained with CSB-RA008790A0HU (red line) at 1:50. The cells were fixed with 70% Ethylalcohol (18h) and then permeabilized with 0.3% Triton X-100 for 2 min. The cells were then incubated in 1x PBS /10% normal goat serum to block non-specific protein-protein interactions followed by primary antibody for 1 h at 4°C. The secondary antibody used was FITC goat anti-rabbit IgG (H+L) at 1/200 dilution for 1 h at 4°C. Control antibody (green line) was used under the same conditions. Acquisition of >10,000 events was performed.

Description

The recombinant FOS monoclonal antibody is produced using in vitro expression system. The expression system is constructed by cloning the human FOS DNA sequence into the expression vector and transfecting clones into the cell line. Individual clones are screened to select the best candidates for production. This FOS antibody shows reactivity with FOS protein from human and mouse. It has undergone affinity-chromatography purification. And it has been tested quality in ELISA, WB, IHC, IF, FC applications.

c-Fos binds to c-Jun to form activator protein 1 (AP1), one of the most powerful transcriptional factors of the immune system. In addition to playing a role in immune regulation, c-Fos is also involved in inflammation and apoptosis.