Anti-Phospho-c-Fos (S32) Antibody [PSH21-99] - BSA and Azide free

HA751815

Product Type:	Recombinant Rabbit monoclonal IgG, primary antibodies
Species reactivity:	Human
Applications:	WB, IF-Cell
Molecular Wt:	Predicted band size: 41 kDa
Clone number:	PSH21-99

Description: Protein c-Fos is a proto-oncogene that is the human homolog of the retroviral oncogene v-fos. It is encoded in humans by the FOS gene. It was first discovered in rat fibroblasts as the transforming gene of the FBJ MSV (Finkel–Biskis–Jinkins murine osteogenic sarcoma virus). It is a part of a bigger Fos family of transcription factors which includes c-Fos, FosB, Fra-1 and Fra-2. It has been mapped to chromosome region 14q21→q31. c-Fos encodes a 62 kDa protein, which forms heterodimer with c-jun (part of Jun family of transcription factors), resulting in the formation of AP-1 (Activator Protein-1) complex which binds DNA at AP-1 specific sites at the promoter and enhancer regions of target genes and converts extracellular signals into changes of gene expression. It plays an important role in many cellular functions and has been found to be overexpressed in a variety of cancers.

Immunogen: Synthetic phospho-peptide corresponding to residues surrounding Ser32 of Human c-Fos.

Positive control: HeLa starved for 16 hours then treated with 200nM TPA for 4 hours cell lysate, HeLa cells starved for 16 hours then treated with 200nM TPA for 4 hours.

Subcellular location: Nucleus, Endoplasmic reticulum, Cytoplasm, cytosol.

Database links: SwissProt: P01100 Human

Recommended Dilutions:

WB	1:5,000
IF-Cell	1:1,000

Storage Buffer: PBS (pH7.4).

Storage Instruction: Store at +4℃ after thawing. Aliquot store at -20℃. Avoid repeated freeze / thaw cycles.

Purity: Protein A affinity purified.

Images

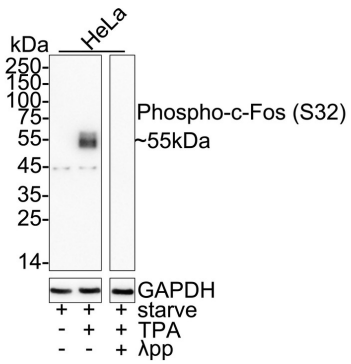

Fig1: Western blot analysis of Phospho-c-Fos (S32) on different lysates with Rabbit anti-Phospho-c-Fos (S32) antibody (HA751815) at 1/5,000 dilution.

Lane 1: HeLa starved for 16 hours cell lysate
Lane 2: HeLa starved for 16 hours then treated with 200nM TPA for 4 hours cell lysate
Lane 3: HeLa starved for 16 hours then treated with 200nM TPA for 4 hours cell lysate, then the membrane treated with λpp for 1 hour

Lysates/proteins at 15 µg/Lane.

Predicted band size: 41 kDa
Observed band size: 55 kDa

Exposure time: 42 seconds; ECL: K1801;

4-20% SDS-PAGE gel.

Proteins were transferred to a PVDF membrane and blocked with 5% NFDM/TBST for 1 hour at room temperature. The primary antibody (HA751815) at 1/5,000 dilution was used in primary antibody dilution (K1803) at 4℃ overnight. Goat Anti-Rabbit IgG - HRP Secondary Antibody (HA1001) at 1/50,000 dilution was used for 1 hour at room temperature.

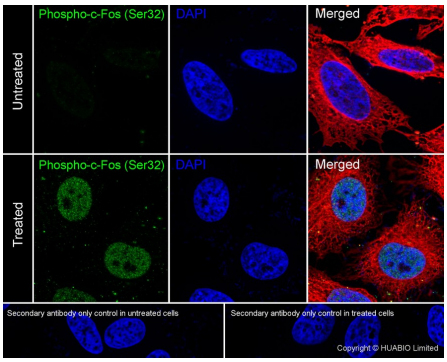

Fig2: Immunocytochemistry analysis of HeLa cells untreated / starved for 16 hours then treated with 200nM TPA for 4 hours labeling Phospho-c-Fos (S32) with Rabbit anti-Phospho-c-Fos (S32) antibody (HA751815) at 1/1,000 dilution.

Cells were fixed in 4% paraformaldehyde for 15 minutes at room temperature, permeabilized with 0.1% Triton X-100 in PBS for 15 minutes at room temperature, then blocked with 1% BSA in 10% negative goat serum for 1 hour at room temperature. Cells were then incubated with Rabbit anti-Phospho-c-Fos (S32) antibody (HA751815) at 1/1,000 dilution in 1% BSA in PBST overnight at 4 ℃. Goat Anti-Rabbit IgG H&L (iFluor™ 488, HA1121) was used as the secondary antibody at 1/1,000 dilution. PBS instead of the primary antibody was used as the secondary antibody only control. Nuclear DNA was labelled in blue with DAPI.

Beta tubulin (HA601187, red) was stained at 1/100 dilution overnight at +4℃. Goat Anti-Mouse IgG H&L (iFluor™ 594, HA1126) was used as the secondary antibody at 1/1,000 dilution.

Background References

1. Matsuoka K et al. Metabolic rewiring controlled by c-Fos governs cartilage integrity in osteoarthritis. Ann Rheum Dis. 2023 Sep
2. Osada N et al. c-FOS is an integral component of the IKZF1 transactivator complex and mediates lenalidomide resistance in multiple myeloma. Clin Transl Med. 2023 Aug