Anti-c-Fos Antibody [JJ0938]

ET1701-95

Product Type:	Recombinant Rabbit monoclonal IgG, primary antibodies
Species reactivity:	Human, Rat
Applications:	WB, IF-Cell, IHC-P
Molecular Wt:	Predicted band size: 41 kDa
Clone number:	JJ0938

Description: Protein c-Fos is a proto-oncogene that is the human homolog of the retroviral oncogene v-fos.[5] 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) (Curran and Tech, 1982). 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 peptide within Human c-Fos aa 231-268 / 380.

Positive control: HeLa serum starved for 40 hours then treated with 20% FBS for 2 hours cell lysate, PC-12 serum starved for 16 hours then treated with 200nM TSA for 4 hours cell lysate, HeLa serum starved for 40 hours then treated with 20% FBS for 2 hours, human placenta tissue.

Subcellular location: Nucleus, Endoplasmic reticulum, Cytoplasm.

Database links: SwissProt: P01100 Human | P01101 Mouse | P12841 Rat

Recommended Dilutions:

WB	1:1,000
IF-Cell	1:100
IHC-P	1:50-1:200

Storage Buffer: 1*PBS (pH7.4), 0.1% BSA, 40% Glycerol, 0.2% Proclean 950.

Storage Instruction: Shipped at 4℃. Store at +4℃ short term (1-2 weeks). Store at -20℃ long term.

Purity: Protein A affinity purified.

Images

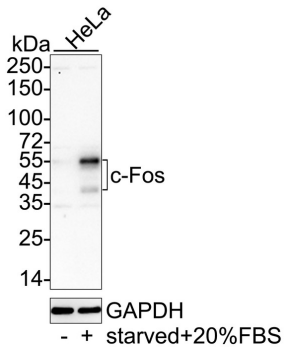

Fig1: Western blot analysis of c-Fos on different lysates with Rabbit anti-c-Fos antibody (ET1701-95) at 1/1,000 dilution.

Lane 1: HeLa cell lysate
Lane 2: HeLa serum starved for 40 hours then treated with 20% FBS for 2 hours cell lysate

Lysates/proteins at 20 µg/Lane.

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

Exposure time: 5 minutes; 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 (ET1701-95) at 1/1,000 dilution was used in 5% NFDM/TBST at 4℃ overnight. Goat Anti-Rabbit IgG - HRP Secondary Antibody (HA1001) at 1/50,000 dilution was used for 1 hour at room temperature.

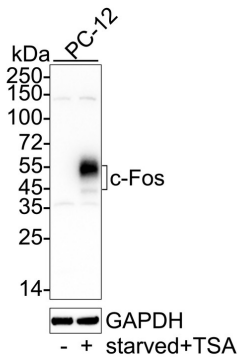

Fig2: Western blot analysis of c-Fos on different lysates with Rabbit anti-c-Fos antibody (ET1701-95) at 1/1,000 dilution.

Lane 1: PC-12 cell lysate
Lane 2: PC-12 serum starved for 16 hours then treated with 200nM TSA for 4 hours cell lysate

Lysates/proteins at 20 µg/Lane.

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

Exposure time: 30 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 (ET1701-95) at 1/1,000 dilution was used in 5% NFDM/TBST at 4℃ overnight. Goat Anti-Rabbit IgG - HRP Secondary Antibody (HA1001) at 1/50,000 dilution was used for 1 hour at room temperature.

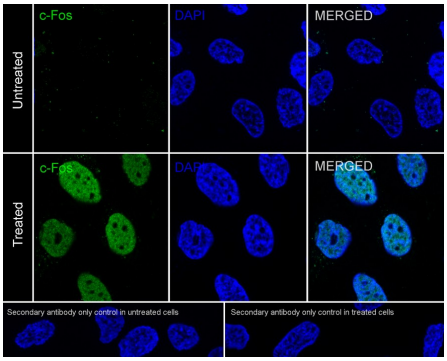

Fig3: Immunocytochemistry analysis of normal HeLa / HeLa serum starved for 40 hours then treated with 20% FBS for 2 hours cells labeling c-Fos with Rabbit anti-c-Fos antibody (ET1701-95) at 1/100 dilution.

Cells were fixed in 4% paraformaldehyde for 20 minutes at room temperature, permeabilized with 0.1% Triton X-100 in PBS for 5 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-c-Fos antibody (ET1701-95) at 1/100 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.

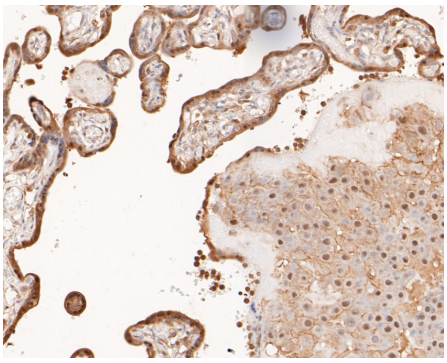

Fig4: Immunohistochemical analysis of paraffin-embedded human placenta tissue using anti-c-Fos antibody. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0) (high pressure) for 2 minutes. The tissues were blocked in 5% BSA for 30 minutes at room temperature, washed with ddH_2O and PBS, and then probed with the primary antibody (ET1701-95, 1/200) for 30 minutes at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.

Note: All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE".

Background References

1. Dantas-Ferreira, R.F. et al. 2015. Food-anticipatory activity in Syrian hamsters: behavioral and molecular responses in the hypothalamus according to photoperiodic conditions. PloS one. 10: e0126519.
2. Zhang, J. et al. 2015. Effect of BioAggregate on Receptor Activator of Nuclear Factor-Kappa B Ligand-induced Osteoclastogenesis from Murine Macrophage Cell Line In Vitro. Journal of endodontics. 41: 1265-71.