Anti-c-Fos Antibody [JJ0938]

ET1701-95

Product Type:	Recombinant Rabbit monoclonal IgG, primary antibodies
Species reactivity:	Mouse, Human, Rat
Applications:	WB, IHC-P, FC, IF-Cell
Molecular Wt:	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: Human placenta tissue, NIH/3T3, NIH/3T3 cell lysate, MCF-7 cell lysate, HeLa serum starved for 40 hours then treated with 20% FBS for 2 hours.

Subcellular location: Nucleus, Endoplasmic reticulum, Cytoplasm.

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

Recommended Dilutions:

WB	1:500
IHC-P	1:50-1:200
FC	1:50-1:100

Storage Buffer: 1*TBS (pH7.4), 0.05% BSA, 40% Glycerol. Preservative: 0.05% Sodium Azide.

Storage Instruction: Store at +4℃ after thawing. Aliquot store at -20℃ or -80℃. Avoid repeated freeze / thaw cycles.

Purity: Protein A affinity purified.

Images

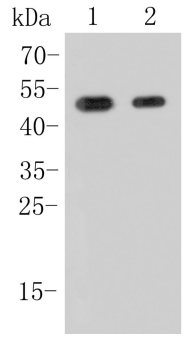

Fig1: Western blot analysis of c-Fos on different lysates. Proteins were transferred to a PVDF membrane and blocked with 5% BSA in PBS for 1 hour at room temperature. The primary antibody (ET1701-95, 1/500) was used in 5% BSA at room temperature for 2 hours. Goat Anti-Rabbit IgG - HRP Secondary Antibody (HA1001) at 1:200,000 dilution was used for 1 hour at room temperature.
Positive control:
Lane 1: NIH/3T3 cell lysate
Lane 2: MCF-7 cell lysate

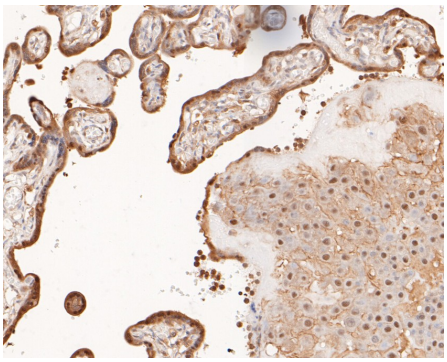

Fig2: Immunohistochemical analysis of paraffin-embedded human placenta tissue using anti-c-Fos antibody. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0) for 20 minutes. The tissues were blocked in 5% BSA for 30 minutes at room temperature, washed 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.

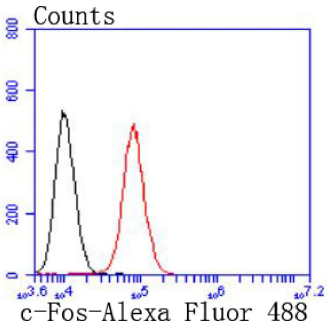

Fig3: Flow cytometric analysis of c-Fos was done on NIH/3T3 cells. The cells were fixed, permeabilized and stained with the primary antibody (ET1701-95, 1/50) (red). After incubation of the primary antibody at room temperature for an hour, the cells were stained with a Alexa Fluor 488-conjugated Goat anti-Rabbit IgG Secondary antibody at 1/1000 dilution for 30 minutes.Unlabelled sample was used as a control (cells without incubation with primary antibody; black).

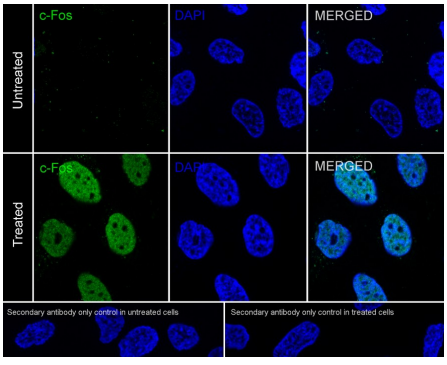

Fig4: Immunocytochemistry analysis of normal HeLa / HeLa serum starved for 40 hours then treated with 20% FBS for 2 hours cells labeling c-Fos with Rabbit anti-c-Fos antibody (ET1701-95) at 1/100 dilution.

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.

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.