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PRODUCT DATASHEET

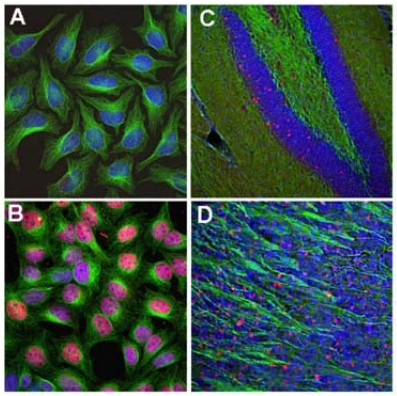
Anti-Cellular oncogene fos (c-FOS) Antibody

Product Details

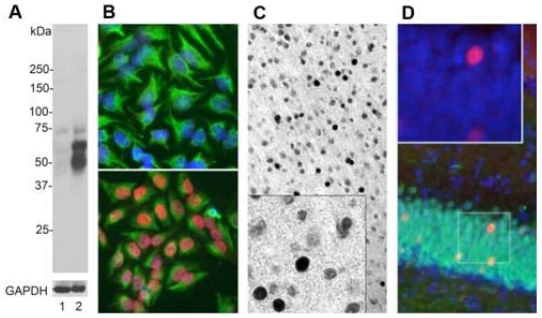
Available Variants	50 µg (SKU:R-1751-50)
Conjugate	Unconjugated
Isotype	IgG
Host Species	Rabbit
Format	Affinity-purified
Physical State	Lyophilized
Buffer	Lyophilized from PBS buffer pH 7.2-7.6 with 0.1% trehalose, and sodium azide
Applications	ICC, IHC, WB
Dilution Ranges	WB: 1:1000-1:2000 (See application details.) IHC: 1:20000-1:50000 (See application details.) ICC: 1:2000-1:10000
Species Reactivity	Human, Mouse, Rat
Immunogen	Full length, E.coli-derived recombinant human c-FOS protein.
Molecular Weight	50-65 kDa (See application details.)
Storage	Spin vial briefly before opening. Reconstitute with 50 µL sterile-filtered, ultrapure water. Centrifuge to remove any insoluble material. Store lyophilized, unopened vial at 2-8°C or lower. After reconstitution, prepare aliquots and store at -20°C for a higher stability. Avoid freeze-thaw cycles.
UniProt ID	P01100
Country of Origin	United States
Shipping	25°C (ambient)
Expiration	12 months after date of receipt (unopened vial).

Usage Statement	For research use only.

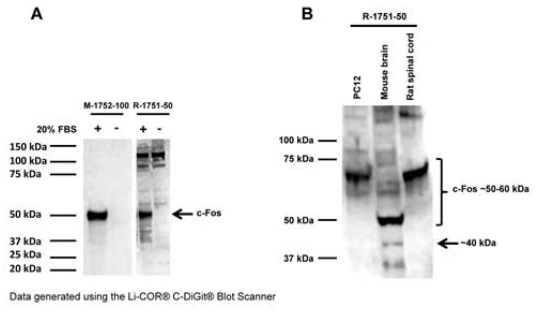
Product Images



Analysis of c-Fos expression in cultured HeLa cells by **Immunocytochemistry (A-B)**, and in mouse hippocampus **(C)** or olfactory bulb sections **(D)** by **Immunohistochemistry**. HeLa cells were kept in serum-free medium for 36 hours, before cells were stimulated with 20% FBS for 30 minutes (B), while control cells (A) were treated with PBS as a control. The rabbit anti-c-Fos antibody (red, 1:5,000) labels nuclei of stimulated cells, while DAPI (blue) stains all cell nuclei independent of their activity stage. Green: mouse anti-tubulin antibody. Mouse hippocampus (C) and olfactory bulb sections (D) were stained with rabbit anti-c-Fos antibody (red, **1:20,000**) and mouse antibody to NF-L (green). The c-FOS antibody stains only nuclei of spontaneously active neurons. NF-L is expressed in axons of neuronal cells. Blue: Cell nuclei stained with DAPI. IHC Method: Following transcardial perfusion of mouse with 4% paraformaldehyde, brain was post fixed for 24 hours, cut to 45 uM, and free-floating sections were stained with above antibodies.



A: Western blot analysis of c-Fos expression in HeLa cells using R-1751-50. HeLa cells were serum-starved for 36 hours (Lane 1). Serum-starved HeLa cells were stimulated with 20% FBS for 2 hours (Lane 2). R-1751-50 recognizes bands in the range of 50-65 kDa, which represent multiple forms of c-Fos. A loading control was performed by stripping and re-probing the membrane with a monoclonal antibody against GAPDH, M-1376-250.
B: Immunofluorescence staining of HeLa cells with R-1751-50. c-Fos staining (red) only localizes in the nuclei of 20% FBS stimulated cells (bottom panel), but not in un-stimulated cells (top panel). Cells were counter-stained with Chicken polyclonal antibody against vimentin, C-1409-50 (green) and DAPI (blue).
C: Immunohistochemistry using R-1751-50 on 4% PFA transcardial-perfused mouse brain sections (45 uM thickness). c-FOS immunoreactive cells (dark colour, localized in cell nucleus) were visualized using a standard HRP-DAB (horseradish peroxidase-diaminobenzidine) staining technique. **D: Immunohistochemistry** using R-1751-50 (red) and Mouse monoclonal anti-NeuN/Fox3 (M-377-100, green) on mouse cortical sections. Neurons positive for c-Fos and Fox3/NeuN appear yellow. The insert shows an enlarged image of staining with R-1751-50. Nuclei were labeled with DAPI (blue).



A: Western blot analysis of c-Fos expression in rat C6 cells (40 ug lysate loading per lane). C6 cells were serum-starved for 20 hours and then stimulated with 20% FBS for 2 hrs (+). Control cells were left in serum-depleted culture medium (-). M-1752-100 and R-1751-50 detect a strong band at 50 kDa in stimulated cells but not in control cells, representing increased c-FOS expression.
B:Western blot analysis of c-Fos expression in PC12 cell lysates (Lane 1, 20 µg), mouse brain (Lane 2, 50 µg) and rat spinal cord homogenate (Lane 3, 50 µg). R-1751-50 detects multiple c-Fos isoforms between ~50-65 kDa which are due to post-translational modifications. In mouse brain, R-1751-50 detects a common c-Fos degradation product (~41 kDa) which appears to be lysate and preparation dependent.
Western Blotting Method: SDS-PAGE: denaturing and reducing, 4-12% Bis-Tris gel; Transfer: Tris-Glycine (Towbin's) buffer with 20% methanol; Membrane: PVDF (0.45 µm); Blocking: 5% skim milk in TBST, 1 hour at RT; Primary antibodies: R-1751-50 (1 µg/mL), M-1752-100 (1 µg/mL), incubation overnight at 4°C; Secondary antibodies: anti-rabbit-HRP (1/6000) or anti-mouse-HRP (1/3000), 1 hour at RT; Detection: Chemiluminiscence.