

Rabbit polyclonal antibody to rh c-FOS: Affinity purified

Catalogue No.:	R-1751-50
Description:	<p>FUNCTION: 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. SUBUNIT: Heterodimer. Interacts with DSIPI; this interaction inhibits the binding of active AP1 to its target DNA. Interacts with MAFB. SUBCELLULAR LOCATION: Nucleus. INDUCTION: C-fos expression increases upon a variety of stimuli, including growth factors, cytokines, neurotransmitters, polypeptide hormones, stress and cell injury. SIMILARITY: Belongs to the bZIP family. Fos subfamily. SIMILARITY: Contains 1 bZIP domain (Ref: uniprot.org).</p>
Batch No.:	See product label.
Unit size:	50 ug
Antigen:	Full length, E.coli-derived recombinant human c-FOS protein.
Antibody Type:	Polyclonal.
Other Names:	Cellular oncogene fos; G0/G1 switch regulatory protein 7; cFOS
Accession:	FOS_HUMAN
Produced in:	Rabbit.
Purity:	Affinity purified.
Applications:	Immunocytochemistry (ICC): 1:2,000-1:10,000. Immunohistochemistry (IHC): 1:20,000-1:50,000. This antibody has been shown to work on 4% PFA fixed mouse brain sections. Note that non-specific staining has been observed on tissue sections when using this antibody at dilutions of 1:5,000 or lower. Click here for instructions on use of this antibody in IHC on free-floating brain sections. Western blotting (WB): 1:1,000-1:2,000. This antibody detects bands between 50-65 kDa, which only appear in stimulated cells. Biosensis recommends optimal dilutions/concentrations should be determined by the end user.
Specificity:	Human.
Cross-reactivity:	Rat, mouse
Form:	Lyophilized from a solution containing PBS, pH 7.2-7.6, 0.1% trehalose, 5 mM sodium azide as preservative.
Reconstitution:	Reconstitute with 50 uL sterile-filtered, ultrapure water, to achieve an antibody concentration of 1 mg/mL. Centrifuge briefly to remove any insoluble material.
Storage:	Store lyophilized antibody at 2-8C. After reconstitution divide into aliquots and store at -20C for long-term storage. Store at 2-8C short-term (up to 4 weeks). Avoid repetitive freeze/thaw

FOR RESEARCH USE ONLY

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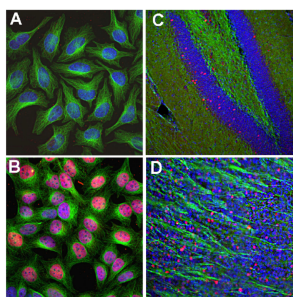
cycles.

Expiry Date: 12 months after purchase if unopened and stored as indicated.

Specific References: Lin King JV et al. (2019). A Cell-Penetrating Scorpion Toxin Enables Mode-Specific Modulation of TRPA1 and Pain. *Cell*. [Epub ahead of print]. Application: IHC. Species: Mouse.

General References: Vanstraten et al (1983) *Proc. Natl. Acad. Sci.* 80: 3183 (Original molecular c-fos sequence paper)

Minson J. et al. (1994) *Brain Res.* 646: 44-52 (Early IHC localization paper)



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 transcatheter perfusion of mouse with 4% paraformaldehyde, brain was post fixed for 24 hours, cut to 45 μ M, and free-floating sections were stained with above antibodies.

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