

p-c-Fos (34E4): sc-81485



The Power to Question

BACKGROUND

The c-Fos oncogene was initially detected in two independent murine osteosarcoma virus isolates and an avian nephroblastoma virus. The cellular homolog, c-Fos, encodes a nuclear phosphoprotein that is rapidly and transiently induced by a variety of agents and functions as a transcriptional regulator for several genes. In contrast to c-Jun proteins, which form homo- and heterodimers which bind to specific DNA response elements, c-Fos proteins are only active as heterodimers with members of the Jun gene family. Functional homologs of c-Fos include the Fra-1, Fra-2 and Fos B genes. In addition, selected ATF/CREB family members can form leucine zipper dimers with Fos and Jun. Different dimers exhibit differential specificity and affinity for AP-1 and CRE sites.

CHROMOSOMAL LOCATION

Genetic locus: FOS (human) mapping to 14q24.3.

SOURCE

p-c-Fos (34E4) is a mouse monoclonal antibody raised against a synthetic phosphopeptide surrounding Ser 374 of c-Fos of human origin.

PRODUCT

Each vial contains 50 µg IgG₁ kappa light chain in 0.5 ml of PBS with < 0.1% sodium azide, 0.1% gelatin, PEG and sucrose.

APPLICATIONS

p-c-Fos (34E4) is recommended for detection of Ser 374 phosphorylated c-Fos of human and canine origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) and immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)].

Suitable for use as control antibody for c-Fos siRNA (h): sc-29221, c-Fos shRNA Plasmid (h): sc-29221-SH and c-Fos shRNA (h) Lentiviral Particles: sc-29221-V.

Molecular Weight of p-c-Fos: 62 kDa.

Positive Controls: A-431 whole cell lysate: sc-2201, HeLa whole cell lysate: sc-2200 or HCT-116 whole cell lysate: sc-364175.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto B Blocking Reagent: sc-2335 (use 50 mM NaF, sc-24988, as diluent), Lambda Phosphatase: sc-200312A and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).

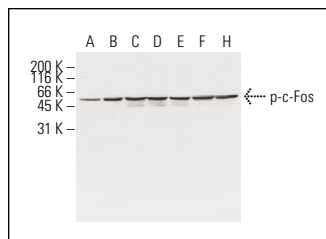
STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

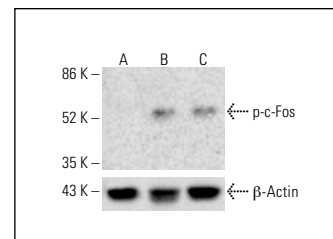
RESEARCH USE

For research use only, not for use in diagnostic procedures.

DATA



p-c-Fos (34E4): sc-81485. Western blot analysis of c-Fos phosphorylation in serum starved Hep G2 cells (A) and serum starved Hep G2 cells treated with 10 ng/ml EGF for 5 min (B), 15 min (C), 30 min (D), 1 hr (E), 2 hrs (F), 4 hrs (G) and 8 hrs (H).



p-c-Fos (34E4): sc-81485. Western blot analysis of c-Fos phosphorylation in untreated (A) and chemically-treated (B, C) HCT-116 whole cell lysates. β-Actin (C4): sc-47778 used as loading control. Detection reagent used: m-IgG Fc BP-HRP: sc-525409.

SELECT PRODUCT CITATIONS

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- Liu, Y., et al. 2018. Protective effects of *Euphrasia officinalis* extract against ultraviolet B-induced photoaging in normal human dermal fibroblasts. *Int. J. Mol. Sci.* 19: 3327.
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- Ansari, M.Y., et al. 2020. Mitochondrial dysfunction triggers catabolic response in chondrocytes via ROS mediated activation of JNK/AP1 pathway. *J. Cell Sci.* 133: jcs247353.
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- Han, H., et al. 2022. RNA-binding motif 4 promotes angiogenesis in HCC by selectively activating VEGF-A expression. *Pharmacol. Res.* 187: 106593.
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- Sah, D.K., et al. 2024. Sulforaphane inhibits IL-1β-Induced IL-6 by suppressing ROS production, AP-1, and STAT3 in colorectal cancer HT-29 cells. *Antioxidants* 13: 406.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.