



Rabbit Anti-c-fos/FITC Conjugated antibody

SL0469R-FITC

Product Name:	Anti-c-fos/FITC
Chinese Name:	FITC标记的c-fos抗体
Alias:	Cellular oncogene fos; FBJ murine osteosarcoma viral v fos oncogene homolog antibody FBJ Osteosarcoma Virus; FOS; FOS protein; G0 G1 switch regulatory protein 7; G0S7; Oncogene FOS; Proto oncogene protein c fos; v fos FBJ murine osteosarcoma viral oncogene homolog; AP-1; p55; FOS_HUMAN; Proto-oncogene c-Fos; G0/G1 switch regulatory protein 7.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Pig,
Applications:	ICC=1:50-200IF=1:50-200 not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	41kDa
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human c-fos
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
Product Detail:	background: The Fos gene family consists of 4 members: FOS, FOSB, FOSL1, and FOSL2. These genes encode leucine zipper proteins that can dimerize with proteins of the JUN family, thereby forming the transcription factor complex AP-1. As such, the FOS proteins have been implicated as regulators of cell proliferation, differentiation, and transformation. In some cases, expression of the FOS gene has also been associated with apoptotic cell

death. [provided by RefSeq, Jul 2008].

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 seem 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.

Subunit:

Heterodimer; with JUN (By similarity). Interacts with MAFB. Component of the SMAD3/SMAD4/JUN/FOS complex required for synergistic TGF-beta-mediated transcription at the AP1 promoter site. Interacts with SMAD3; the interaction is weakened on TGF-beta activation. Interacts with MAFB. Interacts with DSIP1; this interaction inhibits the binding of active AP1 to its target DNA.

Subcellular Location:

Nucleus.

Post-translational modifications:

Phosphorylated in the C-terminal upon stimulation by nerve growth factor (NGF) and epidermal growth factor (EGF). Phosphorylated, in vitro, by MAPK and RSK1. Phosphorylation on both Ser-362 and Ser-374 by MAPK1/2 and RSK1/2 leads to protein stabilization with phosphorylation on Ser-374 being the major site for protein stabilization on NGF stimulation. Phosphorylation on Ser-362 and Ser-374 primes further phosphorylations on Thr-325 and Thr-331 through promoting docking of MAPK to the DEF domain. Phosphorylation on Thr-232, induced by HA-RAS, activates the transcriptional activity and antagonizes sumoylation. Phosphorylation on Ser-362 by RSK2 in osteoblasts contributes to osteoblast transformation (By similarity). [PTM] Constitutively sumoylated by SUMO1, SUMO2 and SUMO3. Desumoylated by SENP2. Sumoylation requires heterodimerization with JUN and is enhanced by mitogen stimulation. Sumoylation inhibits the AP-1 transcriptional activity and is, itself, inhibited by Ras-activated phosphorylation on Thr-232.

Similarity:

Belongs to the bZIP family. Fos subfamily. Contains 1 bZIP domain.

Database links:

[Entrez Gene: 2353](#) Human

[Entrez Gene: 14281](#) Mouse

[Entrez Gene: 314322](#) Rat

[Omim: 164810](#) Human

[SwissProt: P01100](#) Human

[SwissProt: P01101](#) Mouse

[SwissProt: P12841](#) Rat

[Unigene: 246513](#) Mouse

[Unigene: 103750](#) Rat

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

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fos的作用主要用于各种类型的恶性Tumour如食管癌、鼻咽癌、乳腺癌、结肠癌以及脑病的研究。

c-

fos原癌基因及其蛋白产物不仅参与细胞的正常生长、分化过程,而且也参与细胞内信息传递过程和细胞的能量代谢过程,对细胞的增生、分化、转化都有调节作用、在生命活动中起着极为基础而重要的作用。