

# Rabbit Anti-c-fos antibody

# SL23041R

<b>Product Name:</b>	c-fos O
Chinese Name:	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, Chicken, Dog, Pig, Cow, Rabbit,
Applications:	IHC-P=1:400-800IHC-F=1:400-800Flow-Cyt=1µg/TestICC=1:100-500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	41kDa
Cellular localization:	The nucleuscytoplasmic
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human c-fos:331-380/380
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.
PubMed:	<u>PubMed</u>
Product Detail:	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 butnon-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-betaactivation, forms a multimeric SMAD3/SMAD4/JUN/FOS complex at the AP1/SMAD-binding site to regulate TGF-beta-mediated signaling. Hasa critical function in regulating the Hasa critical function inregulating 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 withMAFB. Component of the SMAD3/SMAD4/JUN/FOS complexrequired for syngernistic TGF-beta-mediated transcription at theAP1 promoter site. Interacts with SMAD3; the interaction is weakeven on TGF-beta activation. Interacts with MAFB. Interacts withDSIPI; this interaction inhibits the binding of active AP1 to itstarget DNA.

## **Subcellular Location:**

Nucleus.

#### Post-translational modifications:

Phosphorylated in the C-terminal upon stimulation by nervegrowth factor (NGF) and epidermal growth factor (EGF). Phosphorylated, in vitro, by MAPK and RSK1. Phosphorylation on bothSer-362 and Ser-374 by MAPK1/2 and RSK1/2 leads to proteinstabilization with phosphorylation on Ser-374 being the major site for protein stabilization on NGF stimulation. Phosphorylation onSer-362 and Ser-374 primes further phosphorylations on Thr-325 andThr-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 toosteoblast 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 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.

### **SWISS:**

P01100

Gene ID:

2353

Database links:

Entrez Gene: 2353Human

Entrez Gene: 14281Mouse

Entrez Gene: 314322Rat

Omim: 164810Human

SwissProt: P01100Human

SwissProt: P01101Mouse

SwissProt: P12841Rat

Unigene: 246513Mouse

Unigene: 103750Rat

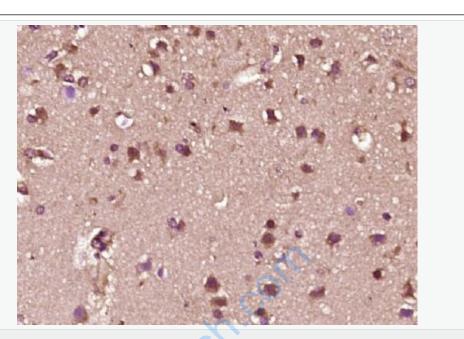
# **Important Note:**

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

c-

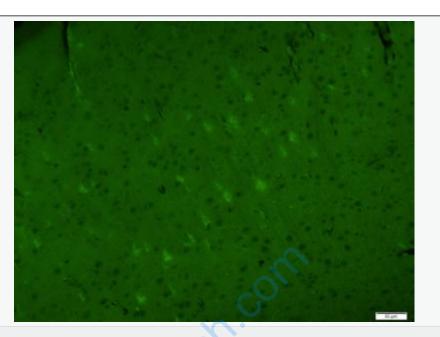
fos的作用主要用于各种类型的恶性Tumour如食管癌、鼻咽癌、乳腺癌、结肠癌以及 脑病的研究。c-

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。

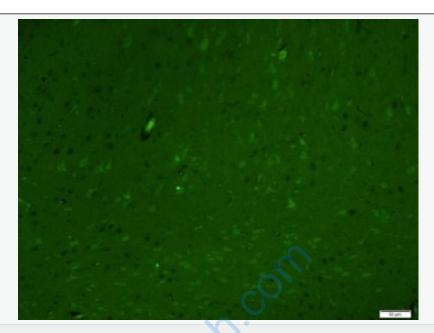


## Picture:

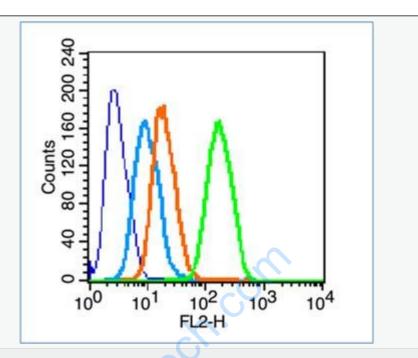
Paraformaldehyde-fixed, paraffin embedded (human brain glioma); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (c-fos) Polyclonal Antibody, Unconjugated (SL23041R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.



Paraformaldehyde-fixed, paraffin embedded (Mouse brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (c-fos) Polyclonal Antibody, Unconjugated (SL23041R) at 1:400 overnight at 4°C, followed by a conjugated Goat Anti-Rabbit IgG antibody (SL23041R) for 90 minutes, and DAPI for nuclei staining.



Paraformaldehyde-fixed, paraffin embedded (Rat brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (c-fos) Polyclonal Antibody, Unconjugated (SL23041R) at 1:400 overnight at 4°C, followed by a conjugated Goat Anti-Rabbit IgG antibody (SL23041R) for 90 minutes, and DAPI for nuclei staining.



Blank control (blue line): Hela cells (fixed with 70% methanol (Overnight at 4°C) and then permeabilized with 90% ice-cold methanol for 20 min at -20°C).

Primary Antibody (green line): Rabbit Anti-c-fos antibody (SL23041R), Dilution: 1µg/10^6 cells;

Isotype Control Antibody (orange line): Rabbit IgG.

Secondary Antibody (white blue line): Goat anti-rabbit IgG-PE<,Dilution: 1µg /test.