

# Rabbit Anti-Phospho-c-Fos (Thr325) antibody

## SL3154R

Product Name:	Phospho-c-Fos (Thr325)
Chinese Name:	磷酸化c-fos抗体
Alias:	c-Fos (phospho T325); c-Fos (phospho-Thr325); c-Fos (phospho Thr325); p-c-Fos (Thr325); 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
<b>React Species:</b>	Human, Mouse, Rat, Chicken, Dog, Pig, Sheep,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-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
<b>Concentration:</b>	1mg/ml
immunogen:	KLH conjugated Synthesised phosphopeptide derived from human c-Fos around the phosphorylation site of Thr325:LC(p-T)PV
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>

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.

### Product Detail:

#### 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.

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

**SWISS:** 

P01100

Gene ID:

2353

Database links:

Entrez Gene: 2353 Human

Entrez Gene: 14281 Mouse

Entrez Gene: 314322 Rat

Omim: 164810 Human

SwissProt: P01100 Human

SwissProt: P01101 Mouse

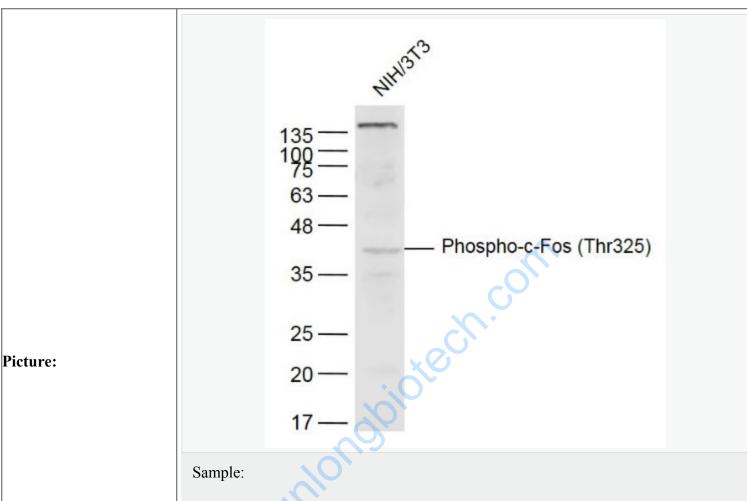
SwissProt: P12841 Rat

Unigene: 246513 Mouse

<u>Unigene: 103750</u> Rat

### Important Note:

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



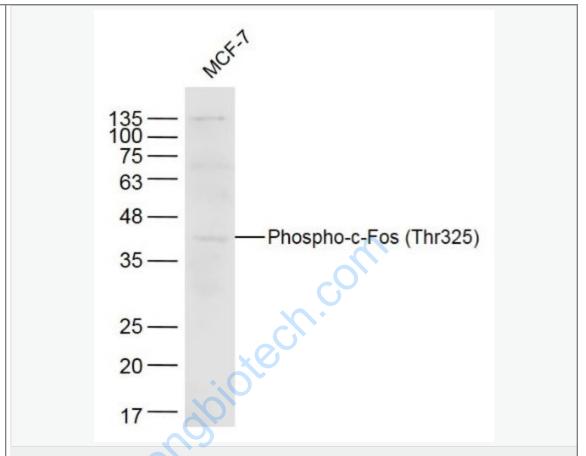
NIH/3T3(Mouse) Cell Lysate at 40 ug

Primary: Anti-Phospho-c-Fos (Thr325) (SL3154R) at 1/300 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 41 kD

Observed band size: 41 kD



### Sample:

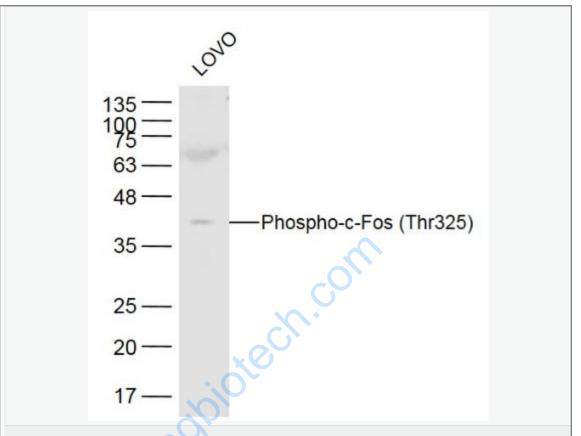
MCF-7(Human)Cell Lysate at 40 ug

Primary: Anti-Phospho-c-Fos (Thr325) (SL3154R) at 1/300 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 41 kD

Observed band size: 41 kD



# Sample:

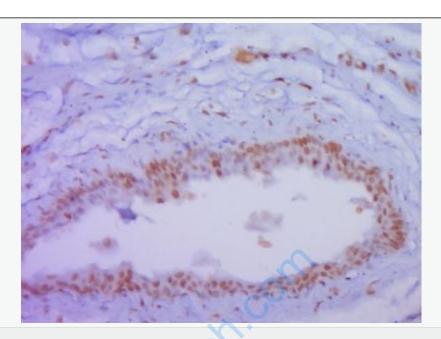
LOVO(Human) Cell Lysate at 40 ug

Primary: Anti-Phospho-c-Fos (Thr325) (SL3154R) at 1/300 dilution

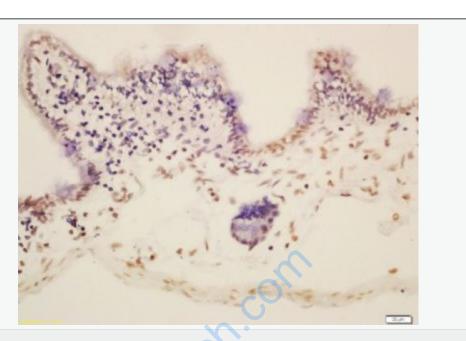
Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 41 kD

Observed band size: 41 kD



Paraformaldehyde-fixed, paraffin embedded (Rat urinary bladder); 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 (P-c-Fos (Thr325)) Polyclonal Antibody, Unconjugated (SL3154R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.

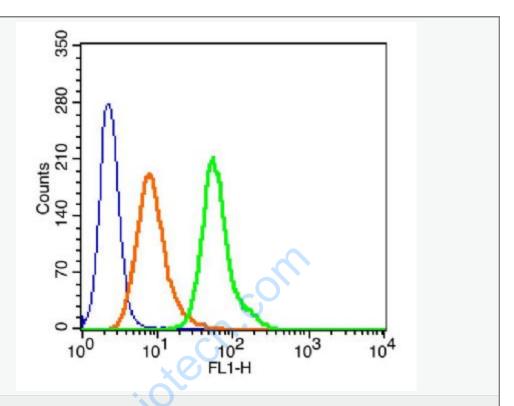


Tissue/cell: mouse intestine tissue; 4% Paraformaldehyde-fixed and paraffinembedded;

Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum, C-0005) at 37°C for 20 min;

Incubation: Anti-Phospho-c-Fos (Thr325) Polyclonal Antibody,

Unconjugated(SL3154R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining



Blank control(blue): 293T(fixed with 2% paraformaldehyde (10 min) and then permeabilized with ice-cold 90% methanol for 30 min on ice).

Primary Antibody: Rabbit Anti- Phospho-c-Fos (Thr325)/AF488 Conjugated antibody (SL3154R), Dilution: 1µg in 100 µL 1X PBS containing 0.5% BSA; Isotype Control Antibody: Rabbit IgG/FITC(orange) ,used under the same conditions.