

## Summary

Production Name	c-Fos (phospho Ser362) Rabbit Polyclonal Antibody
Description	Rabbit Polyclonal Antibody
Host	Rabbit
Application	WB,CoIP,IHC-P,IF-P,IF-F,ICC/IF,ELISA
Reactivity	Human, Mouse, Rat

#### Performance

Conjugation	Unconjugated	
Modification	Phospho Antibody	
lsotype	IgG	
Clonality	Polyclonal	
Form	Liquid	
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw	
	cycles.	
Buffer	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.	
Purification	Affinity purification	

#### Immunogen

Gene Name	FOS
Alternative Names	FOS; G0S7; Proto-oncogene c-Fos; Cellular oncogene fos; G0/G1 switch regulatory
	protein 7
Gene ID	2353.0
SwissProt ID	P01100.The antiserum was produced against synthesized peptide derived from human
	Fos around the phosphorylation site of Ser362. AA range:331-380

# Application

Dilution Ratio	WB 1:500-1:2000, IHC-P 1:100-1:300, ELISA 1:10000, IF-P/IF-F/ICC/IF 1:50-200
Molecular Weight	62kDa



#### 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, c-fos and JUN/AP-1 basic regions each seems to interact with symmetrical DNA half sites. 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.,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., PTM: 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., similarity:Belongs to the bZIP family., similarity:Belongs to the bZIP family. Fos subfamily., similarity: Contains 1 bZIP domain., subunit: Heterodimer with JUN. Interacts with DSIPI; this interaction inhibits the binding of active AP1 to its target DNA. Interacts with MAFB.,

#### **Research Area**

MAPK\_ERK\_Growth;MAPK\_G\_Protein;Toll\_Like;T\_Cell\_Receptor;B\_Cell\_Antigen;Pathways in cancer;Colorectal cancer;



### Image Data

Enzyme-Linked Immunosorbent Assay (Phospho-ELISA) for Immunogen Phosphopeptide (Phospho-left) and Non-



Phosphopeptide (Phospho-right), using Fos (Phospho-Ser362) Antibody



Immunohistochemistry analysis of paraffin-embedded human thyroid gland, using Fos (Phospho-Ser362) Antibody. The picture on the right is blocked with the phospho peptide.



Western blot analysis of lysates from K562 cells treated with forskolin 40nM 30 ', using Fos (Phospho-Ser362) Antibody.

The lane on the	right is blocked with the phospho peptide.
178 138 100	2931 AUZ93 HELA HEPGZ ZZRV1
70	Phospho-c-Fos (S362)
55	
40	
35	
25	
15	

Western Blot analysis of various cells using Phospho-c-Fos (S362) Polyclonal Antibody diluted at 1: 2000 cells nucleus extracted by Minute TM Cytoplasmic and Nuclear Fractionation kit (SC-003,Inventbiotech,MN,USA).





Western Blot analysis of 293T cells using Phospho-c-Fos (S362) Polyclonal Antibody diluted at 1: 2000 cells nucleus extracted by Minute TM Cytoplasmic and Nuclear Fractionation kit (SC-003,Inventbiotech,MN,USA).

#### Note

For research use only.