

Immunotag™ c-Fos (phospho Ser374) Polyclonal Antibody

Antibody Specification	
Catalog No.	ITP1095
Product Description	Immunotag™ c-Fos (phospho Ser374) Polyclonal Antibody
Size	50 µg, 100 µg
Conjugation	HRP, Biotin, FITC, Alexa Fluor® 350, Alexa Fluor® 405, Alexa Fluor® 488, Alexa Fluor® 555, Alexa Fluor® 594, Alexa Fluor® 647
IMPORTANT NOTE	This product is custom manufactured with a lead time of 3-4 weeks. Once in production, this item cannot be cancelled from an order and is not eligible for return.
Target Protein	c-FOS (Ser374)
Clonality	Polyclonal
Storage/Stability	-20°C/1 year
Application	IHC-p,WB,ELISA
Recommended Dilution	WB 1:500-2000 Immunohistochemistry: 1/100 - 1/300. ELISA: 1/10000. Not yet tested in other applications.
Concentration	1 mg/ml
Reactive Species	Human,Mouse,Rat
Host Species	Rabbit
Immunogen	Synthesized phospho-peptide around the phosphorylation site of human c-Fos (phospho Ser374)
Specificity	Phospho-c-Fos (S374) Polyclonal Antibody detects endogenous levels of c-Fos protein only when phosphorylated at S374.
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen
Form	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Gene Name	FOS
Accession No.	P01100 P01101 P12841
Alternate Names	FOS; G0S7; Proto-oncogene c-Fos; Cellular oncogene fos; G0/G1 switch regulatory protein 7

Antibody Specification

Description	Fos proto-oncogene, AP-1 transcription factor subunit(FOS) Homo sapiens 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],
Cell Pathway/ Category	MAPK_ERK_Growth,MAPK_G_Protein,Toll_Like,T_Cell_Receptor,B_Cell_Antigen,Pathways in cancer,Colorectal cancer,
Protein Expression	Lung adenocarcinoma,Pancreas,Tongue,
Subcellular Localization	nucleus,nucleoplasm,transcription factor complex,endoplasmic reticulum,cytosol,membrane,neuron projection,
Protein Function	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.,
Usage	For Research Use Only! Not for diagnostic or therapeutic procedures.