10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

c-Fos Antibody

Purified Mouse Monoclonal Antibody (Mab)
Catalog # AP52813

Product Information

Application	WB
Primary Accession	P01100
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Isotype	IgG1
Calculated MW	40695

Additional Information

Gene ID	2353
Other Names	Activator protein 1;AP 1;Cellular oncogene c fos;Cellular oncogene fos;FBJ murine osteosarcoma viral (v fos) oncogene homolog (oncogene FOS);FBJ murine osteosarcoma viral v fos oncogene homolog;FBJ Osteosarcoma Virus;FOS;FOS protein;FOS_HUMAN;G0 G1 switch regulatory protein 7;G0/G1 switch regulatory protein 7;G0S7;Oncogene FOS;p55;proto oncogene c Fos;Proto oncogene protein c fos;Proto-oncogene c-Fos;v fos FBJ murine osteosarcoma viral oncogene homolog.
Dilution	WB~~1:500
Format	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide, pH 7.3.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

Name	FOS
Synonyms	G0S7
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 seems 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. In growing cells, activates phospholipid synthesis, possibly by activating CDS1

and PI4K2A. This activity requires Tyr-dephosphorylation and association with the endoplasmic reticulum.

Cellular Location

Nucleus. Endoplasmic reticulum. Cytoplasm, cytosol. Note=In quiescent cells, present in very small amounts in the cytosol. Following induction of cell growth, first localizes to the endoplasmic reticulum and only later to the nucleus. Localization at the endoplasmic reticulum requires dephosphorylation at Tyr-10 and Tyr- 30

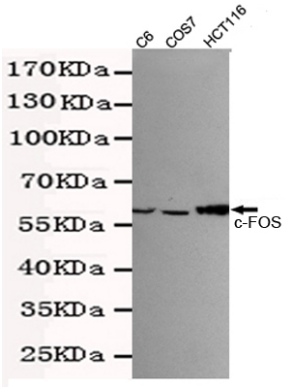
Background

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 seems 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. In growing cells, activates phospholipid synthesis, possibly by activating CDS1 and PI4K2A. This activity requires Tyr-dephosphorylation and association with the endoplasmic reticulum.

References

van Straaten F.,et al.Proc. Natl. Acad. Sci. U.S.A. 80:3183-3187(1983).
Ota T.,et al.Nat. Genet. 36:40-45(2004).
Heilig R.,et al.Nature 421:601-607(2003).
Mural R.J.,et al.Submitted (JUL-2005) to the EMBL/GenBank/DDBJ databases.
Roux P.,et al.Oncogene 6:2155-2160(1991).

Images



Western blot detection of c-Fos in HCT116,COS7 and C6 cell lysates using c-Fos mouse mAb (1:500 diluted).Predicted band size:62KDa.Observed band size:62KDa.