

PRODUCT DATA SHEET

Bioworld Technology,Inc.

c-FOS monoclonal antibody

Catalog: MB66574 Host: Mouse Reactivity: Human, Rat, Monkey

BackGround:

The Fos family of nuclear oncogenes includes c-Fos, FosB, Fos-related antigen 1 (FRA1), and Fos-related antigen 2 (FRA2). While most Fos proteins exist as a single isoform, the FosB protein exists as two isoforms: full-length FosB and a shorter form, FosB2 (Delta FosB), which lacks the carboxy-terminal 101 amino acids. The expression of Fos proteins is rapidly and transiently induced by a variety of extracellular stimuli including growth factors, cytokines, neurotransmitters, polypeptide hormones, and stress. Fos proteins dimerize with Jun proteins (c-Jun, JunB, and JunD) to form Activator Protein-1 (AP-1), a transcription factor that binds to TRE/AP-1 elements and activates transcription. Fos and Jun proteins contain the leucine-zipper motif that mediates dimerization and an adjacent basic domain that binds to DNA. The various Fos/Jun heterodimers differ in their ability to transactivate AP-1 dependent genes. In addition to increased expression, phosphorylation of Fos proteins by Erk kinases in response to extracellular stimuli may further increase transcriptional activity. Phosphorylation of c-Fos at Ser32 and Thr232 by Erk5 increases protein stability and nuclear localization. Phosphorylation of FRA1 at Ser252 and Ser265 by Erk1/2 increases protein stability and leads to overexpression of FRA1 in cancer cells. Following growth factor stimulation, expression of FosB and c-Fos in quiescent fibroblasts is immediate, but very short-lived, with protein levels dissipating after several hours. FRA1 and FRA2 expression persists longer, and appreciable levels can be detected in asynchronously growing cells. Deregulated expression of c-Fos, FosB, or FRA2 can result in neoplastic cellular transformation; however, Delta FosB lacks the ability to transform cells.

Product:

Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide, pH 7.3.

Molecular Weight:

~ 62 kDa

Swiss-Prot:

P01100

Purification&Purity:

The antibody was purified by immunogen affinity chromatography.

Applications:

WB (1/500 - 1/1000)

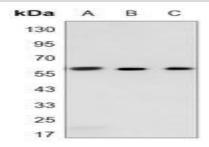
Storage&Stability:

Store at $4 \, \mathbb{C}$ short term. Aliquot and store at $-20 \, \mathbb{C}$ long term. Avoid freeze-thaw cycles.

Specificity:

Recognizes endogenous levels of c-FOS protein.

DATA:



Western blot analysis of c-FOS expression in HCT116 (A), COS7 (B),

C6 (C) whole cell lysates.

Note:

For research use only, not for use in diagnostic procedure.

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