

FOS Antibody

Purified Mouse Monoclonal Antibody Catalog # A01710a

Specification

FOS Antibody - Product Information

Application WB, IHC, FC, E

Primary Accession
Reactivity
Host
Clonality
Isotype
P01100
Human
Mouse
Monoclonal
IgG1

Calculated MW 40.7kDa KDa

Description

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.

Immunogen

Purified recombinant fragment of human FOS expressed in E. Coli.

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Formulation

Ascitic fluid containing 0.03% sodium azide.

FOS Antibody - Additional Information

Gene ID 2353

Other Names

Proto-oncogene c-Fos, Cellular oncogene fos, G0/G1 switch regulatory protein 7, FOS, G0S7

Dilution

WB~~1/500 - 1/2000 IHC~~1/200 - 1/1000 FC~~1/200 - 1/400 E~~1/10000

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

FOS Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

FOS Antibody - 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.

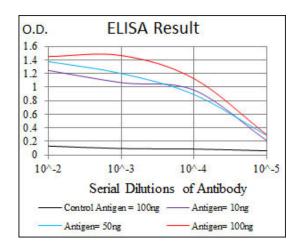
Cellular Location

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

FOS Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- <u>Immunofluorescence</u>
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture





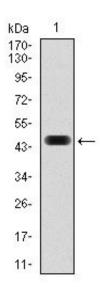


Figure 1: Western blot analysis using FOS mAb against human FOS (AA: 116-298) recombinant protein. (Expected MW is 45.8 kDa)

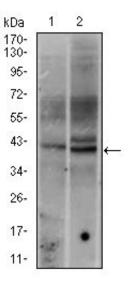


Figure 2: Western blot analysis using FOS mouse mAb against HeLa (1), and HeLa (2) cell lysate.

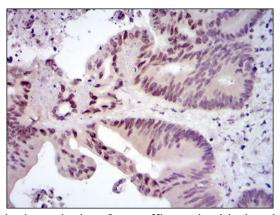


Figure 3: Immunohistochemical analysis of paraffin-embedded colon cancer tissues using FOS mouse mAb with DAB staining.



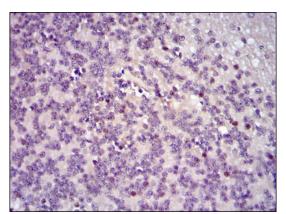


Figure 4: Immunohistochemical analysis of paraffin-embedded cerebellum tissues using FOS mouse mAb with DAB staining.

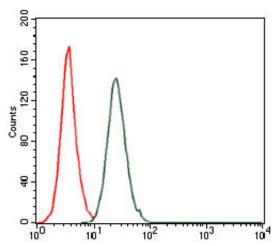


Figure 5: Flow cytometric analysis of HeLa cells using FOS mouse mAb (green) and negative control (red).

FOS Antibody - References

Mol Cell Biochem. 2010 Apr;337(1-2):53-63. Cancer Invest. 2009 Oct;27(8):816-24.