

Anti-c-Fos Antibody

Catalog # ABO10644

Specification

Anti-c-Fos Antibody - Product Information

ApplicationWBPrimary AccessionP01100HostRabbitReactivityHuman, Mouse, RatClonalityPolyclonalFormatLyophilizedDescriptionRabbit IgG polyclonal antibody for Proto-oncogene c-Fos(FOS) detection. Tested with WB inHuman;Mouse;Rat.

Reconstitution Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-c-Fos Antibody - Additional Information

Gene ID 2353

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

Calculated MW 40695 MW KDa

Application Details Western blot, 0.1-0.5 μg/ml, Human, Rat, Mouse

Subcellular Localization

Nucleus. Endoplasmic reticulum. Cytoplasm, cytosol. 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.

Protein Name Proto-oncogene c-Fos

Contents Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg Thimerosal, 0.05mg NaN3.

Immunogen

A synthetic peptide corresponding to a sequence in the middle region of human c-Fos(170-187aa DQLEDEKSALQTEIANLL), identical to the related rat and mouse sequences.

Purification

Immunogen affinity purified.



Cross Reactivity No cross reactivity with other proteins

Storage

At -20°C for one year. After r°Constitution, at 4°C for one month. It°Can also be aliquotted and stored frozen at -20°C for a longer time.Avoid repeated freezing and thawing.

Sequence Similarities Belongs to the bZIP family. Fos subfamily.

Anti-c-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

Anti-c-Fos Antibody - Protocols

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

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

Anti-c-Fos Antibody - Images





Anti-c-Fos antibody, ABO10644, Western blottingLane 1: HT1080 Cell LysateLane 2: COLO320 Cell Lysate

Anti-c-Fos Antibody - Background

The human oncogene c-fos is cellular homolog of the transforming gene of Finkel-Biskis-Jinkins(FBJ) murine osteosarcoma virus which was mapped to a single human chromosome. c-Fos is encoded by the FOS gene. FOS was the first transcription factor identified that has a critical function in regulating the development of cells destined to form and maintain the skeleton. FOS is also a major component of the activator protein-1(AP-1) transcription factor complex, which includes members of the JUN family. c-fos is a major nuclear target for signal transduction pathways involved in the regulation of cell growth, differentiation, and transformation. Using transgenic and knockout mice, Grigoriadis et al.(1995) established a unique role for the proto-oncogene and nuclear transcription factor, Fos, in regulating the differentiation and activity of specific bone cell populations, both during normal development and in bone disease.