



DB025: c-Fos (A14)

Background:

The products of the proto-oncogenes c-Jun (c-Jun was previously known as the Fos-binding protein p39) and c-Fos are known to form a complex in the nucleus (2, 6). AP-1 (activating protein-1) is a collective term referring to these dimeric transcription factors composed of Jun, Fos or ATF (activating transcription factor) subunits that bind to a common DNA site, the AP-1-binding site (1). There is evidence that AP-1 proteins, mostly those that belong to the Jun group, control cell life and death through their ability to regulate the expression and function of cell cycle regulators such as Cyclin D1, p53, p21 (cip1/waf1), p19 (ARF) and p16 (3). The Fos and Jun proto-oncogenes expression is induced transiently by a great variety of extracellular stimuli associated with mitogenesis, differentiation processes or depolarization of neurons (5). Studies have established a unique role for Fos in determining the differentiation and activity of progenitors of the osteoclast lineage (4).

Origin:

c-Fos (A14) is provided as an affinity purified rabbit polyclonal antibody, raised against a peptide mapping to the amino terminus of human c-Fos.

Product Details:

Each vial contains 200 µg/ml of affinity purified rabbit IgG, c-Fos (A14) *DB025*, in 1 ml PBS containing 0.1 % sodium azide and 0.2% gelatin.

Competition Studies:

A blocking peptide is also available, *DB025P*, for use in competition studies. Each vial contains 100 µg of peptide in 0.5 ml PBS with 0.1% sodium azide and 100 µg BSA.

Specificity:

c-Fos (A14) *DB025* reacts with c-Fos of mouse, rat and human origin by western blotting, immunoprecipitation and immunohistochemistry. Western blotting starting dilution: 1:200.

Storage:

Store this product at 4° C, do not freeze. The product is stable for one year from the date of shipment.

References:

1. Karin M, Liu Zg, Zandi E. AP-1 function and regulation. *Curr Opin Cell Biol.* 1997 Apr;9(2):240-6.
2. Bos TJ, Rauscher FJ 3rd, Curran T, Vogt PK. The carboxy terminus of the viral Jun oncoprotein is required for complex formation with the cellular Fos protein. *Oncogene.* 1989 Feb;4(2):123-6.
3. Shaulian E, Karin M. AP-1 in cell proliferation and survival. *Oncogene.* 2001 Apr 30;20(19):2390-400.
4. Liebermann DA, Gregory B, Hoffman B. AP-1 (Fos/Jun) transcription factors in hematopoietic differentiation and apoptosis. *Int J Oncol.* 1998 Mar;12(3):685-700.
5. Curran T. Fos and Jun: oncogenic transcription factors. *Tohoku J Exp Med.* 1992 Oct;168(2):169-74.
6. Rauscher FJ 3rd, Voulalas PJ, Franza BR Jr, Curran T. Fos and Jun bind cooperatively to the AP-1 site: reconstitution in vitro. *Genes Dev.* 1988 Dec;2(12B):1687-99.