

FRA-1

Fos-related Antigen 1

human, recombinant, *E. coli*

Cat. No.	Amount
PR-842	5 µg

For *in vitro* use only
Quality guaranteed for 12 months
Store at -80°C

Avoid freeze / thaw cycles

Form

Liquid. Supplied in 20 mM Tris-HCl pH 8.0, 20% glycerol, 100 mM KCl, 0.2 mM EDTA and 1 mM DTT.

Activity

20-200 ng are sufficient for an *in vitro* transcription assay and 100 ng are sufficient for a protein-protein interaction assay.

Application

Use only for research. FRA-1 can be applied in *in vitro* transcription assays, DNA-protein and protein-protein interaction assays.

Molecular Weight

29 kDa

Purity

> 95% by SDS-PAGE

Description

The fos-related antigen 1 (Fra-1, or FosL1: Fos-like antigen 1) is a member of the Fos onco-protein family and a component of AP-1 transcription factor. Similar to other members of the family, Fra-1 contains a leucine zipper domain and a highly conserved C-terminal region. Transcription of Fra-1 gene is regulated by multiple cis-elements and 12-O-tetradecanoylphorbol-13-acetate (TPA). Fra-1 expression is associated with proliferation and invasiveness of breast cancer cells and other cancer cells.

Selected References:

- Belguise *et al.* (2005) FRA-1 expression level regulates proliferation and invasiveness of breast cancer cells. *Oncogene* **24**:1434.
- Adisheshaiah *et al.* (2003) Multiple cis-elements mediate the transcriptional activation of human fra-1 by 12-O-tetradecanoylphorbol-13-acetate in bronchial epithelial cells. *J. Biol. Chem.* **278**:47423.
- Wang *et al.* (2002) Elevated protein expression of cyclin D1 and Fra-1 but decreased expression of c-Myc in human colorectal adenocarcinomas overexpressing beta-catenin. *Int. J. Cancer* **101**:301.
- Matsui *et al.* (1990) Isolation of human fos-related genes and their expression during monocyte-macrophage differentiation. *Oncogene* **3**:249.
- Cohen *et al.* (1989) The product of a fos-related gene, fra-1, binds cooperatively to the AP-1 site with Jun: transcription factor AP-1 is comprised of multiple protein complexes. *Genes Dev.* **2**:173.