

# EFP (m2): 293T Lysate: sc-125286

## BACKGROUND

EFP (estrogen-responsive finger protein) is a transcription factor, the content of which is regulated by estrogen. It has been identified as a member of the RING finger family, a family of proteins containing a Zn<sup>2+</sup> binding domain designated the C3HC4 or RING finger. EFP also contains two B box domains and a coiled-coil region (a transactivation domain), which are characteristic of a subgroup of the RING finger family. Estrogen regulates the growth, differentiation and function of target cells in a variety of tissues; however, few genes have been shown to be directly regulated by estrogen. It has been speculated that EFP may mediate estrogen activity in a signaling cascade in which estrogen-ER binding to the estrogen responsive element (ERE) downstream of the EFP gene upregulates EFP gene expression. The EFP gene product may then activate transcription of secondary estrogen responsive genes. Additional studies indicate that the EFP promoter may be regulated by multiple elements and their interacting factors.

## REFERENCES

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3. Inoue, S., et al. 1993. Genomic binding-site cloning reveals an estrogen-responsive gene that encodes a RING finger protein. *Proc. Natl. Acad. Sci. USA* 90: 11117-11121.
4. Orimo, A., et al. 1995. Molecular cloning, structure, and expression of mouse estrogen-responsive finger protein EFP. Co-localization with estrogen receptor mRNA in target organs. *J. Biol. Chem.* 270: 24406-24013.
5. Borden, K.L., et al. 1995. The solution structure of the RING finger domain from the acute promyelocytic leukaemia proto-oncoprotein PML. *EMBO J.* 14: 1532-1541.
6. Ikeda, K., et al. 1997. Multiple regulatory elements and binding proteins of the 5'-flanking region of the human estrogen-responsive finger protein (EFP) gene. *Biochem. Biophys. Res. Comm.* 236: 765-771.
7. Urano, T., et al. 2002. EFP targets 14-3-3 s for proteolysis and promotes breast tumour growth. *Nature* 417: 871-875.
8. Nakasato, N., et al. 2006. A ubiquitin E3 ligase EFP is upregulated by interferons and conjugated with ISG15. *Biochem. Biophys. Res. Commun.* 351: 540-546.
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## STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) for detailed protocols and support products.

## CHROMOSOMAL LOCATION

Genetic locus: Trim25 (mouse) mapping to 11 C.

## PRODUCT

EFP (m2): 293T Lysate represents a lysate of mouse EFP transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

## APPLICATIONS

EFP (m2): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive EFP antibodies. Recommended use: 10-20 µl per lane.

Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

## RESEARCH USE

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