

EFP (E-12): sc-271254

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 Zn²⁺ 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.

CHROMOSOMAL LOCATION

Genetic locus: TRIM25 (human) mapping to 17q22; Trim25 (mouse) mapping to 11 C.

SOURCE

EFP (E-12) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 150-175 near the N-terminus of EFP of human origin.

PRODUCT

Each vial contains 200 µg IgG₃ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin. Also available as TransCruz reagent for Gel Supershift and ChIP applications, sc-271254 X, 200 µg/0.1 ml.

Blocking peptide available for competition studies, sc-271254 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

APPLICATIONS

EFP (E-12) is recommended for detection of EFP of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for EFP siRNA (h): sc-37825, EFP siRNA (m): sc-37826, EFP shRNA Plasmid (h): sc-37825-SH, EFP shRNA Plasmid (m): sc-37826-SH, EFP shRNA (h) Lentiviral Particles: sc-37825-V and EFP shRNA (m) Lentiviral Particles: sc-37826-V.

EFP (E-12) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

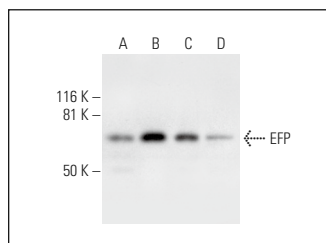
Molecular Weight of EFP: 70 kDa.

Positive Controls: HeLa nuclear extract: sc-2120, C32 nuclear extract: sc-2136 or MCF7 nuclear extract: sc-2149.

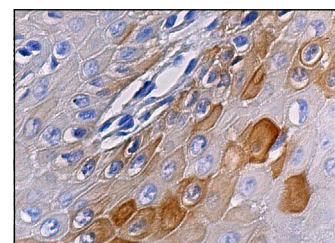
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850. 4) Immunohistochemistry: use m-IgGκ BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

DATA



EFP (E-12): sc-271254. Western blot analysis of EFP expression in MCF7 (A), HeLa (B) and C32 (C) nuclear extracts and I-11.15 whole cell lysate (D).



EFP (E-12): sc-271254. Immunoperoxidase staining of formalin fixed, paraffin-embedded human oral mucosa tissue showing cytoplasmic staining of subset of epithelial cells.

SELECT PRODUCT CITATIONS

1. Zhang, P., et al. 2015. TRIM25 has a dual function in the p53/Mdm2 circuit. *Oncogene* 34: 5729-5738.
2. Park, H.S., et al. 2021. NLRP3 inflammasome activation enhanced by TRIM25 is targeted by the NS1 protein of 2009 pandemic Influenza A Virus. *Front. Microbiol.* 12: 778950.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

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

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.