SANTA CRUZ BIOTECHNOLOGY, INC.

# NF-E2 p18 (C-16): sc-477

SANTA CRUZ BIOTECHNOLOGY

*The Power to Question*

## BACKGROUND

The nuclear DNA binding protein NF-E2 regulates expression of globulin genes in developing erythroid cells through interaction with upstream AP-1-like recognition sites. More specifically, NF-E2 recognizes a site containing an intact AP-1 binding motif, preceded by a G residue two base pairs upstream. NF-E2 is an obligate heterodimer composed of NF-E2 p45 and NF-E2 p18. NF-E2 p18, also known as NF-E2U or MafK, is a ubiquitously expressed component that is related to the v-Maf oncogene. It contains a basic leucine zipper domain that functions in DNA binding and dimerization. In addition, NF-E2 p18 may play a role in erythroid differentiation. The major component of NF-E2 is a polypeptide, designated NF-E2 p45, that belongs to the basic region leucine zipper family of transcription factors. This subunit of NF-E2 is specifically expressed at low level in hematopoietic progenitor cells and differentiated cells of the erythroid, megakaryocyte and mast cell lineages.

## CHROMOSOMAL LOCATION

Genetic locus: MAFK (human) mapping to 7p22.3; Mafk (mouse) mapping to 5 G2.

## SOURCE

NF-E2 p18 (C-16) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping at the C-terminus of NF-E2 p18 of mouse origin.

## PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-477 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

Available as TransCruz reagent for Gel Supershift and ChIP applications, sc-477 X, 200 µg/0.1 ml.

## APPLICATIONS

NF-E2 p18 (C-16) is recommended for detection of NF-E2 p18 (also designated MafK) of mouse, rat and human origin by Western Blotting (starting dilution 1:200, 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 NF-E2 p18 siRNA (h): sc-38103, NF-E2 p18 siRNA (m): sc-38104, NF-E2 p18 shRNA Plasmid (h): sc-38103-SH, NF-E2 p18 shRNA Plasmid (m): sc-38104-SH, NF-E2 p18 shRNA (h) Lentiviral Particles: sc-38103-V and NF-E2 p18 shRNA (m) Lentiviral Particles: sc-38104-V.

NF-E2 p18 (C-16) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of NF-E2 p18: 18 kDa.

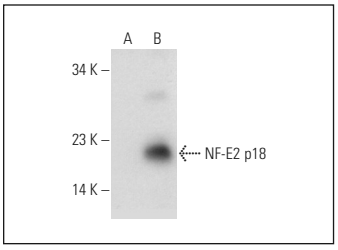
## RESEARCH USE

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

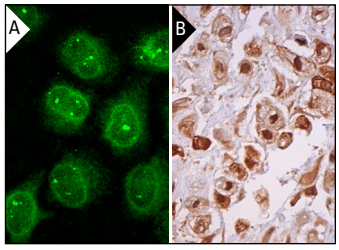
## STORAGE

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

## DATA




NF-E2 p18 (C-16): sc-477. Western blot analysis of NF-E2 p18 expression in non-transfected: sc-117752 (**A**) and mouse NF-E2 p18 transfected: sc-122032 (**B**) 293T whole cell lysates.




NF-E2 p18 (C-16): sc-477. Immunofluorescence staining of methanol-fixed HeLa cells showing nuclear localization (**A**). Immunoperoxidase staining of formalin fixed, paraffin-embedded human placenta tissue showing nuclear and cytoplasmic staining of decidual cells (**B**).

## SELECT PRODUCT CITATIONS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4. Bouzinba-Segard, H., et al. 2006. Accumulation of small murine minor satellite transcripts leads to impaired centromeric architecture and function. Proc. Natl. Acad. Sci. USA 103: 8709-8714.
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