

NF-E2 (H-230): sc-22827

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: NFE2 (human) mapping to 12q13.13; Nfe2 (mouse) mapping to 15 F3.

SOURCE

NF-E2 (H-230) is a rabbit polyclonal antibody raised against amino acids 1-230 of NF-E2 of human origin.

PRODUCT

Each vial contains 200 µg IgG 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-22827 X, 200 µg/0.1 ml.

APPLICATIONS

NF-E2 (H-230) is recommended for detection of NF-E2 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

NF-E2 (H-230) is also recommended for detection of NF-E2 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for NF-E2 siRNA (h): sc-36046, NF-E2 p18 siRNA (m): sc-38104, NF-E2 shRNA Plasmid (h): sc-36046-SH, NF-E2 p18 shRNA Plasmid (m): sc-38104-SH, NF-E2 shRNA (h) Lentiviral Particles: sc-36046-V and NF-E2 p18 shRNA (m) Lentiviral Particles: sc-38104-V.

NF-E2 (H-230) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

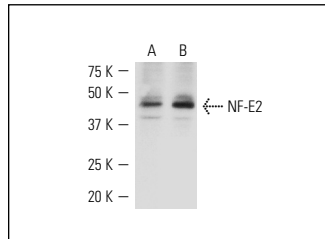
Molecular Weight of NF-E2: 45 kDa.

Positive Controls: K-562 whole cell lysate: sc-2203, HeLa whole cell lysate: sc-2200 or K-562 nuclear extract: sc-2130.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



NF-E2 (H-230): sc-22827. Western blot analysis of NF-E2 expression in K-562 whole cell lysate (A) and K-562 nuclear extract (B).

SELECT PRODUCT CITATIONS

- Kooren, J., et al. 2007. β -globin active chromatin Hub formation in differentiating erythroid cells and in p45 NF-E2 knock-out mice. *J. Biol. Chem.* 282: 16544-16552.
- Kim, Y.W. and Kim, A. 2013. Histone acetylation contributes to chromatin looping between the locus control region and globin gene by influencing hypersensitive site formation. *Biochim. Biophys. Acta* 1829: 963-969.
- Su, M.Y., et al. 2013. Identification of biologically relevant enhancers in human erythroid cells. *J. Biol. Chem.* 288: 8433-8444.

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.



Try **NF-E2 (D-6): sc-365083** or **NF-E2 (G-2): sc-514429**, our highly recommended monoclonal alternatives to NF-E2 (H-230).