**BACKGROUND**

E4BP4, also known as NFIL3, functions as a transcriptional repressor and is a member of the basic leucine zipper (bZIP) transcription factor family. E4BP4 binds with high specificity to the E4 ATF, which is a DNA sequence traditionally targeted by the ATF/CREB family of transcription factors. A 65 amino acid segment located in the carboxy-terminus of E4BP4 interacts specifically with the TBP binding protein Dr1. In the suprachiasmatic nucleus, circadian center and liver, E4BP4 competes with PAR proteins for DNA binding via a reciprocating mechanism. The phase expression of E4BP4 correlates with the circadian cycle and represses transcription of genes otherwise activated by PAR transcription regulators. E4BP4 also plays an important role in an IL-3-mediated signaling pathway that is responsible for the survival of B cell progenitors. The gene encoding human E4BP4 maps to chromosome 9q22.31.

**CHROMOSOMAL LOCATION**

Genetic locus: MED1 (human) mapping to 17q12; Med1 (mouse) mapping to 11 D.

**SOURCE**

E4BP4 (A-9) is a mouse monoclonal antibody raised against amino acids 163-462 mapping at the C-terminus of E4BP4 of human origin.

**PRODUCT**

Each vial contains 200 µg IgG 1 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-74415 X, 200 µg/0.1 ml.

**STORAGE**

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

**APPLICATIONS**

TRAP220 (H-7) is recommended for detection of TRAP220 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 TRAP220 siRNA (h): sc-38593, TRAP220 siRNA (m): sc-38594, TRAP220 shRNA Plasmid (h): sc-38593-SH, TRAP220 shRNA Plasmid (m): sc-38594-SH, TRAP220 shRNA (h) Lentiviral Particles: sc-38593-V and TRAP220 shRNA (m) Lentiviral Particles: sc-38594-V.

E4BP4 (A-9) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of E4BP4: 60 kDa.

Positive Controls: E4BP4 (h): 293 Lysate: sc-110510, Ramos cell lysate: sc-2216 or HeLa whole cell lysate: sc-2200.

**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-206214 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**

![Western blot analysis of E4BP4 expression in non-transfected: sc-110760 (A) and human E4BP4 transfected: sc-110510 (B) 293 whole cell lysates.](image)

![Immunofluorescence staining of methanol-fixed HeLa cells showing nuclear localization.](image)

**SELECT PRODUCT CITATIONS**


**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.