

EAF1 (A-10): sc-373832

BACKGROUND

The ELL family of RNA polymerase II (Pol II) elongation factors function to activate transcript elongation by inhibiting the transient pausing of Pol II. ELL-associated factor 1 (EAF1) and EAF2 directly interact with ELL family members ELL and ELL2, functioning as transcriptional activators of their elongation activities. More specifically, EAF1 and EAF2 can form a complex with ELL that targets the ternary elongation complex of Pol II, stimulating the rate of elongation. In addition, EAF1 and EAF2 are important for the stability of the NuA4 histone acetyltransferase complex, which transcriptionally activates certain genes by acetylation of Histones H4 and H2A. Both EAF1 and EAF2 are ubiquitously expressed members of the EAF family that colocalize with ELL to the the Cajal bodies and nuclear speckles. EAF1 contains a C-terminal region rich in aspartic acid, glutamic acid and serine residues. EAF2 is an androgen-response gene and can act as a potent apoptosis inducer.

CHROMOSOMAL LOCATION

Genetic locus: EAF1 (human) mapping to 3p25.1; Eaf1 (mouse) mapping to 14 B.

SOURCE

EAF1 (A-10) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 219-257 near the C-terminus of EAF1 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-373832 X, 200 µg/0.1 ml.

Blocking peptide available for competition studies, sc-373832 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

APPLICATIONS

EAF1 (A-10) is recommended for detection of EAF1 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

EAF1 (A-10) is also recommended for detection of EAF1 in additional species, including equine and canine.

Suitable for use as control antibody for EAF1 siRNA (h): sc-62249, EAF1 siRNA (m): sc-62250, EAF1 shRNA Plasmid (h): sc-62249-SH, EAF1 shRNA Plasmid (m): sc-62250-SH, EAF1 shRNA (h) Lentiviral Particles: sc-62249-V and EAF1 shRNA (m) Lentiviral Particles: sc-62250-V.

EAF1 (A-10) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

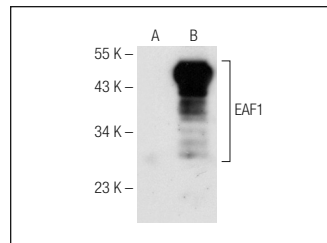
Molecular Weight of EAF1: 43 kDa.

Positive Controls: K-562 nuclear extract: sc-2130, Jurkat nuclear extract: sc-2132 or human EAF1 transfected HEK293T whole cell lysate.

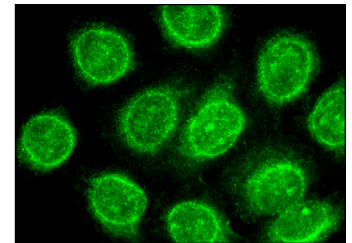
RECOMMENDED SUPPORT REAGENTS

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.

DATA



EAF1 (A-10): sc-373832. Western blot analysis of EAF1 expression in non transfected (A) and human EAF1 transfected (B) HEK293T whole cell lysates.



EAF1 (A-10): sc-373832. Immunofluorescence staining of methanol-fixed HeLa cells showing nuclear localization.

SELECT PRODUCT CITATIONS

1. Yadav, D., et al. 2019. Multivalent role of human TFIID in recruiting elongation components at the promoter-proximal region for transcriptional control. Cell Rep. 26: 1303-1317.e7.

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.