

EAFF2 (K-20): sc-66371

BACKGROUND

The ELL family of RNA Pol II elongation factors function to activate transcript elongation by inhibiting the transient pausing of RNA Pol II. ELL associated factor 1 (EAF1) and EAF2 directly interact with the 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 RNA 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. EAF2, also known as U19, BM040 or TRAITs (testosterone-regulated apoptosis inducer and tumor suppressor protein), is a ubiquitously expressed member of the EAF family that co-localizes with ELL to the the Cajal bodies and nuclear speckles. EAF2 is an androgen-response gene and can act as a potent apoptosis inducer.

REFERENCES

1. Luo, R.T., Lavau, C., Du, C., Simone, F., Polak, P.E., Kawamata, S. and Thirman, M.J. 2001. The elongation domain of ELL is dispensable but its ELL-associated factor 1 interaction domain is essential for MLL-ELL-induced leukemogenesis. *Mol. Cell. Biol.* 21: 5678-5687.
2. Simone, F., Polak, P.E., Kaberlein, J.J., Luo, R.T., Levitan, D.A. and Thirman, M.J. 2001. EAF1, a novel ELL-associated factor that is delocalized by expression of the MLL-ELL fusion protein. *Blood* 98: 201-209.
3. Li, M., Wu, X., Zhuang, F., Jiang, S., Jiang, M. and Liu, Y.H. 2003. Expression of murine ELL-associated factor 2 (EAF2) is developmentally regulated. *Dev. Dyn.* 228: 273-280.
4. Polak, P.E., Simone, F., Kaberlein, J.J., Luo, R.T. and Thirman, M.J. 2003. ELL and EAF1 are Cajal body components that are disrupted in MLL-ELL leukemia. *Mol. Biol. Cell* 14: 1517-1528.
5. Simone, F., Luo, R.T., Polak, P.E., Kaberlein, J.J. and Thirman, M.J. 2003. ELL-associated factor 2 (EAF2), a functional homolog of EAF1 with alternative ELL binding properties. *Blood* 101: 2355-2362.
6. Xiao, W., Jiang, F. and Wang, Z. 2005. ELL binding regulates U19/EAF2 intracellular localization, stability, and transactivation. *Prostate* 66: 1-12.

CHROMOSOMAL LOCATION

Genetic locus: EAF2 (human) mapping to 3q13.33.

SOURCE

EAFF2 (K-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of EAF2 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.

Blocking peptide available for competition studies, sc-66371 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-66371 X, 200 µg/0.1 ml.

APPLICATIONS

EAFF2 (K-20) is recommended for detection of ELL-associated factor 2 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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).

Suitable for use as control antibody for EAF2 siRNA (h): sc-62251, EAF2 shRNA Plasmid (h): sc-62251-SH and EAF2 shRNA (h) Lentiviral Particles: sc-62251-V.

EAFF2 (K-20) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

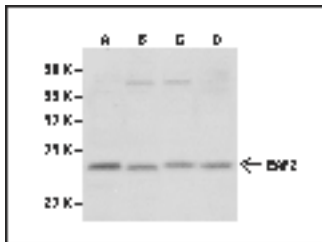
Molecular Weight of EAF2: 29 kDa.

Positive Controls: JAR cell lysate: sc-2276, Jurkat whole cell lysate: sc-2204 or HeLa whole cell lysate: sc-2200.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



EAFF2 (K-20) sc-66371 Western blot analysis of EAF2 expression in JAR (A), HeLa (E), Jurkat (G) and HeLa (D) whole cell lysates.

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 or our catalog for detailed protocols and support products.