SANTA CRUZ BIOTECHNOLOGY, INC.

EEIG1 (C-14): sc-83794

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The Power to Question

BACKGROUND

EEIG1 (early estrogen-induced gene 1 protein), also known as FAM102A, is a 384 amino acid protein presumed to play a role in estrogen action. A member of the FAM102 family, EEIG1 is induced by 17 β-estradiol (E2) as well as additional estrogenic compounds, and is repressed by antiestrogens such as 4-hydroxy-tamoxifen and ICI 182,780. EEIG1 exists as 2 alternative splice variants that are encoded by a gene located on human chromosome 9, which houses over 900 genes and comprises nearly 4% of the human genome. Hereditary hemorrhagic telangiectasia, which is characterized by harmful vascular defects, and Familial dysautonomia, are both associated with chromosome 9. Notably, chromosome 9 encompasses the largest interferon family gene cluster.

REFERENCES

1. Wang, D.Y., et al. 2004. Identification of estrogen-responsive genes by complementary deoxyribonucleic acid microarray and characterization of a novel early estrogen-induced gene: EEIG1. Mol. Endocrinol. 18: 402-411.
2. Burmeister, T., et al. 2007. Atypical BCR-ABL mRNA transcripts in adult acute lymphoblastic leukemia. Haematologica 92: 1699-1702.
3. Fjaerli, H.O., et al. 2007. Cord blood gene expression in infants hospitalized with respiratory syncytial virus bronchiolitis. J. Infect. Dis. 196: 394-404.
4. Cottin, V., et al. 2007. Pulmonary vascular manifestations of hereditary hemorrhagic telangiectasia (rendu-osler disease). Respiration 74: 361-378.
5. Online Mendelian Inheritance in Man, OMIM™. 2007. Johns Hopkins University, Baltimore, MD. MIM Number: 610891. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/
6. Zeitz, M.J., et al. 2009. Organization of the amplified type I interferon gene cluster and associated chromosome regions in the interphase nucleus of human osteosarcoma cells. Chromosome Res. 17: 305-319.
7. Axelrod, F.B., et al. 2010. Neuroimaging supports central pathology in familial dysautonomia. J. Neurol. 257: 198-206.

CHROMOSOMAL LOCATION

Genetic locus: FAM102A (human) mapping to 9q34.11; Fam102a (mouse) mapping to 2 B.

SOURCE

EEIG1 (C-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of EEIG1 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-83794 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-83794 X, 200 µg/0.1 ml.

APPLICATIONS

EEIG1 (C-14) is recommended for detection of EEIG1 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).

Suitable for use as control antibody for EEIG1 siRNA (h): sc-77229, EEIG1 siRNA (m): sc-77230, EEIG1 shRNA Plasmid (h): sc-77229-SH, EEIG1 shRNA Plasmid (m): sc-77230-SH, EEIG1 shRNA (h) Lentiviral Particles: sc-77229-V and EEIG1 shRNA (m) Lentiviral Particles: sc-77230-V.

EEIG1 (C-14) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight (predicted) of EEIG1 isoforms: 42/40 kDa.

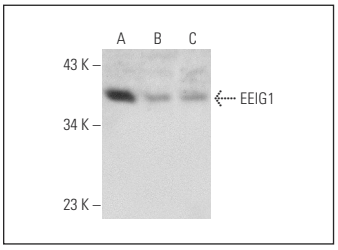
Molecular Weight (observed) of EEIG1: 37-43 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, SK-MEL-28 cell lysate: sc-2236 or MIA PaCa-2 cell lysate: sc-2285.

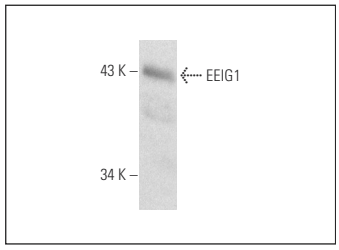
RECOMMENDED SECONDARY REAGENTS

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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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



EEIG1 (C-14): sc-83794. Western blot analysis of EEIG1 expression in HeLa (**A**), MIA PaCa-2 (**B**) and SK-MEL-28 (**C**) whole cell lysates.



EEIG1 (C-14): sc-83794. Western blot analysis of EEIG1 expression in HeLa whole cell lysate.

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.