

EEIG1 (C-8): sc-514961

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 two 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.

CHROMOSOMAL LOCATION

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

SOURCE

EEIG1 (C-8) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 335-352 near the C-terminus of EEIG1 of human origin.

PRODUCT

Each vial contains 200 μ g IgG_{2a} 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-514961 X, 200 μ g/0.1 ml.

EEIG1 (C-8) is available conjugated to agarose (sc-514961 AC), 500 μ g/0.25 ml agarose in 1 ml, for IP; to HRP (sc-514961 HRP), 200 μ g/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-514961 PE), fluorescein (sc-514961 FITC), Alexa Fluor[®] 488 (sc-514961 AF488), Alexa Fluor[®] 546 (sc-514961 AF546), Alexa Fluor[®] 594 (sc-514961 AF594) or Alexa Fluor[®] 647 (sc-514961 AF647), 200 μ g/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor[®] 680 (sc-514961 AF680) or Alexa Fluor[®] 790 (sc-514961 AF790), 200 μ g/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-514961 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

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APPLICATIONS

EEIG1 (C-8) is recommended for detection of EEIG1 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g 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-8) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

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

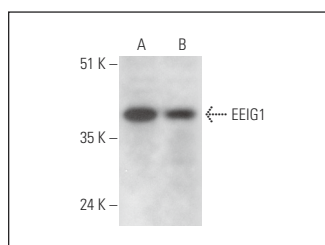
Molecular Weight (observed) of EEIG1: 37-43 kDa.

Positive Controls: NIH/3T3 whole cell lysate: sc-2210 or MIA PaCa-2 cell lysate: sc-2285.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ 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-IgG κ BP-FITC: sc-516140 or m-IgG κ 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



EEIG1 (C-8): sc-514961. Western blot analysis of EEIG1 expression in NIH/3T3 (A) and MIA PaCa-2 (B) 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.