

Evi-1 (H-8): sc-515456

BACKGROUND

The Evi-1 proto-oncogene contains two zinc finger domains, the second of which is essential for transactivation of the c-Fos promoter and for AP-1 activation. The first zinc finger domain binds to Smad3, suppressing its activity and inhibiting TGF β signaling. The t(3;21)(q26;q22) chromosomal translocation produces a chimeric transcription factor, AML-1/Evi-1, that appears to suppress the transactivation of AML-1, which is a stimulator of myeloid cell differentiation. Inappropriate Evi-1 gene expression in hematopoietic cells has been shown to be associated with acute myelogenous leukemia (AML) and myelodysplastic syndromes.

CHROMOSOMAL LOCATION

Genetic locus: MECOM (human) mapping to 3q26.2; Mecom (mouse) mapping to 3 A3.

SOURCE

Evi-1 (H-8) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 808-835 within an internal region of Evi-1 of human origin.

PRODUCT

Each vial contains 200 μ g IgG_{2b} 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-515456 X, 200 μ g/0.1 ml.

Evi-1 (H-8) is available conjugated to agarose (sc-515456 AC), 500 μ g/0.25 ml agarose in 1 ml, for IP; to HRP (sc-515456 HRP), 200 μ g/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-515456 PE), fluorescein (sc-515456 FITC), Alexa Fluor[®] 488 (sc-515456 AF488), Alexa Fluor[®] 546 (sc-515456 AF546), Alexa Fluor[®] 594 (sc-515456 AF594) or Alexa Fluor[®] 647 (sc-515456 AF647), 200 μ g/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor[®] 680 (sc-515456 AF680) or Alexa Fluor[®] 790 (sc-515456 AF790), 200 μ g/ml, for Near-Infrared (NIR) WB, IF and FCM.

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APPLICATIONS

Evi-1 (H-8) is recommended for detection of Evi-1 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 Evi-1 siRNA (h): sc-37873, Evi-1 siRNA (m): sc-37874, Evi-1 shRNA Plasmid (h): sc-37873-SH, Evi-1 shRNA Plasmid (m): sc-37874-SH, Evi-1 shRNA (h) Lentiviral Particles: sc-37873-V and Evi-1 shRNA (m) Lentiviral Particles: sc-37874-V.

Evi-1 (H-8) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

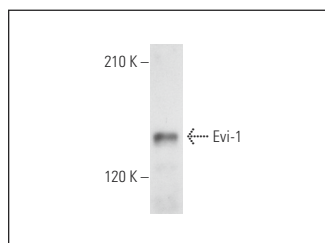
Molecular Weight of Evi-1: 145 kDa.

Positive Controls: SK-OV-3 whole cell lysate: sc-364229 or ES-2 cell lysate: sc-24674.

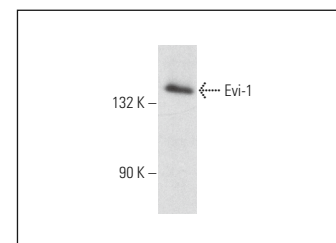
RECOMMENDED SUPPORT REAGENTS

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



Evi-1 (H-8): sc-515456. Western blot analysis of Evi-1 expression in SK-OV-3 whole cell lysate.



Evi-1 (H-8): sc-515456. Western blot analysis of Evi-1 expression in ES-2 whole cell lysate.

SELECT PRODUCT CITATIONS

- Gui, H.X., et al. 2021. HDAC1-Smad3-mSin3A complex is required for Smad3-induced transcriptional inhibition of hepatocyte growth factor receptor in human lung cancers. *Carcinogenesis* 42: 587-600.
- Wang, Z., et al. 2021. EVI1 overexpression promotes ovarian cancer progression by regulating estrogen signaling. *Mol. Cell. Endocrinol.* 534: 111367.

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.