

TCEAL1 (F-4): sc-393621

BACKGROUND

TCEAL1 (transcription elongation factor A (SII) protein 3), also known as p21, SIIR or pp21, is a member of the TFS-II family. Transcription elongation factors of the TFS-II family are responsible for releasing RNA polymerase II (Pol II) from transcriptional arrest. DNA arresting sites can result in locked ternary complexes if elongating RNA polymerases are trapped. Transcription elongation factors function to activate the intrinsic RNA cleavage activity of RNA polymerases. This allows the RNA polymerase to cleave the nascent transcript, thereby forming a new 3'-terminus to resume elongation. TCEAL1 is a 157 amino acid nuclear protein that is ubiquitously expressed. TCEAL1 may exert its effects via protein-protein interactions with other transcriptional regulators rather than via direct binding of DNA. Phosphorylation of TCEAL1 on Ser 36 and Ser 37 is critical for transcriptional repression.

CHROMOSOMAL LOCATION

Genetic locus: TCEAL1 (human) mapping to Xq22.2; Tceal1 (mouse) mapping to X F1.

SOURCE

TCEAL1 (F-4) is a mouse monoclonal antibody raised against amino acids 79-122 mapping within an internal region of TCEAL1 of human origin.

PRODUCT

Each vial contains 200 µg IgG_{2a} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

TCEAL1 (F-4) is available conjugated to agarose (sc-393621 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-393621 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-393621 PE), fluorescein (sc-393621 FITC), Alexa Fluor® 488 (sc-393621 AF488), Alexa Fluor® 546 (sc-393621 AF546), Alexa Fluor® 594 (sc-393621 AF594) or Alexa Fluor® 647 (sc-393621 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-393621 AF680) or Alexa Fluor® 790 (sc-393621 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

APPLICATIONS

TCEAL1 (F-4) is recommended for detection of TCEAL1 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), immunohistochemistry (including paraffin-embedded sections) (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 TCEAL1 siRNA (h): sc-91043, TCEAL1 siRNA (m): sc-154130, TCEAL1 shRNA Plasmid (h): sc-91043-SH, TCEAL1 shRNA Plasmid (m): sc-154130-SH, TCEAL1 shRNA (h) Lentiviral Particles: sc-91043-V and TCEAL1 shRNA (m) Lentiviral Particles: sc-154130-V.

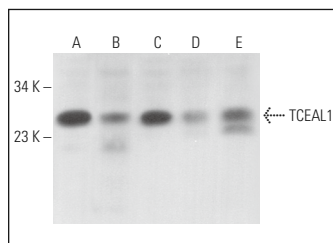
Molecular Weight of TCEAL1: 21 kDa.

Positive Controls: SJRH30 cell lysate: sc-2287, DU 145 cell lysate: sc-2268 or HeLa whole cell lysate: sc-2200.

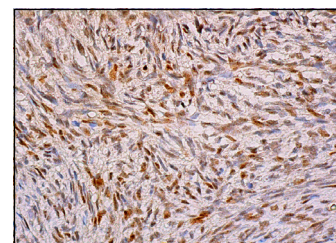
RECOMMENDED SUPPORT REAGENTS

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. 4) Immunohistochemistry: use m-IgGκ BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

DATA



TCEAL1 (F-4): sc-393621. Western blot analysis of TCEAL1 expression in HeLa (A), DU 145 (B), SJRH30 (C), Sol8 (D) and AT3B-1 (E) whole cell lysates.



TCEAL1 (F-4): sc-393621. Immunoperoxidase staining of formalin fixed, paraffin-embedded human ovary tissue showing nuclear staining of ovarian stroma cells.

SELECT PRODUCT CITATIONS

1. Rushworth, L.K., et al. 2020. *In vivo* CRISPR/Cas9 knockout screen: TCEAL1 silencing enhances docetaxel efficacy in prostate cancer. Life Sci. Alliance 3: e202000770.

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.

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