SANTA CRUZ BIOTECHNOLOGY, INC.

Med18 (E-4): sc-514415

BACKGROUND

In mammalian cells, transcription is regulated in part by high molecular weight co-activating complexes that mediate signals between transcriptional activators and RNA polymerase II (Pol II). The mediator complex is one such multi-protein structure that functions as a bridge between regulatory proteins and Pol II, thereby regulating Pol II-dependent transcription. Med18 (mediator complex subunit 18), also known as p28b, is a 208 amino acid protein that localizes to nucleus and exists as a component of the mediator complex. Working in tandem with several other proteins, including Med8 and Med25, Med18 serves as a scaffold for the assembly of a functional preinitiation complex with Pol II and general transcription factors, thereby activating the transcription of Pol II-dependent genes.

CHROMOSOMAL LOCATION

Genetic locus: MED18 (human) mapping to 1p35.3; Med18 (mouse) mapping to 4 D2.3.

SOURCE

Med18 (E-4) is a mouse monoclonal antibody raised against amino acids 1-208 representing full length Med18 of human origin.

PRODUCT

Each vial contains 200 µg IgG_1 kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Med18 (E-4) is available conjugated to agarose (sc-514415 AC), 500 µg/ 0.25 ml agarose in 1 ml, for IP; to HRP (sc-514415 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-514415 PE), fluorescein (sc-514415 FITC), Alexa Fluor® 488 (sc-514415 AF488), Alexa Fluor® 546 (sc-514415 AF546), Alexa Fluor® 594 (sc-514415 AF594) or Alexa Fluor® 647 (sc-514415 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-514415 AF680) or Alexa Fluor® 790 (sc-514415 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

APPLICATIONS

Med18 (E-4) is recommended for detection of Med18 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for Med18 siRNA (h): sc-88848, Med18 siRNA (m): sc-149349, Med18 shRNA Plasmid (h): sc-88848-SH, Med18 shRNA Plasmid (m): sc-149349-SH, Med18 shRNA (h) Lentiviral Particles: sc-88848-V and Med18 shRNA (m) Lentiviral Particles: sc-149349-V.

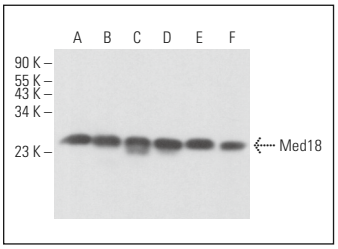
Molecular Weight of Med18: 24 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, Jurkat whole cell lysate: sc-2204 or HL-60 whole cell lysate: sc-2209.

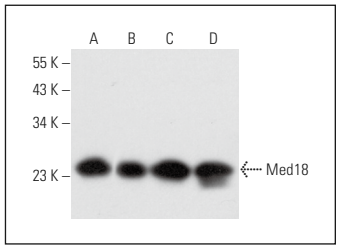
RECOMMENDED SUPPORT REAGENTS

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.

DATA



Med18 (E-4): sc-514415. Western blot analysis of Med18 expression in HeLa (**A**), MOLT-4 (**B**), NAMALWA (**C**), Raji (**D**), BYDP (**E**) and 3611-RF (**F**) whole cell lysates.



Med18 (E-4): sc-514415. Western blot analysis of Med18 expression in HeLa (**A**), HEK293T (**B**), Jurkat (**C**) and HL-60 (**D**) whole cell lysates.

SELECT PRODUCT CITATIONS

1. Xuan, Y., et al. 2019. Long non-coding RNA SNHG3 promotes progression of gastric cancer by regulating neighboring Med18 gene methylation. Cell Death Dis. 10: 694.
2. Teng, J.F., et al. 2020. Polyphyllin VI induces caspase-1-mediated pyroptosis via the induction of ROS/NFκB/NLRP3/GSDMD signal axis in non-small cell lung cancer. Cancers 12: 193.
3. Zhou, L.H., et al. 2023. Metformin inhibits ovarian granular cell pyroptosis through the miR-670-3p/NOX2/ROS pathway. Aging 15: 4429-4443.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.