SANTA CRUZ BIOTECHNOLOGY, INC.

Med10 (C-2): sc-393450

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

The mediator complex is a multiprotein coactivator that is involved in the regulated transcription of Pol II-dependent genes. Functioning as a bridge to convey information from gene-specific regulatory proteins to the basal Pol II transcription machinery, the mediator complex is recruited to promoter regions by directly interacting with regulatory proteins. The mediator complex also serves as a scaffold for the assembly of a functional pre-initiation complex with Pol II and other general transcription factors. Med10 (mediator of RNA polymerase II transcription subunit 10), also designated transformation-related gene 17 protein, is a 135 amino acid nuclear protein that is a middle domain component of the mediator complex. Reduction of Med10 protein levels within cells leads to an enhancement of Wnt and Nodal signaling pathways. Also, in yeast, mutation the gene encoding Med10, as well as other middle domain mediator components, leads to enhanced transcription wild-type heat-shock genes.

REFERENCES

1. Gu, W., et al. 1999. A novel human SRB/MED-containing cofactor complex, SMCC, involved in transcription regulation. Mol. Cell 3: 97-108.
2. Malik, S., et al. 2000. The USA-derived transcriptional coactivator PC2 is a submodule of TRAP/SMCC and acts synergistically with other PCs. Mol. Cell 5: 753-760.
3. Akoulitchev, S., et al. 2000. TFIIH is negatively regulated by Cdk8-containing mediator complexes. Nature 407: 102-106.
4. Sato, S., et al. 2004. A set of consensus mammalian mediator subunits identified by multidimensional protein identification technology. Mol. Cell 14: 685-691.

CHROMOSOMAL LOCATION

Genetic locus: MED10 (human) mapping to 5p15.31; Med10 (mouse) mapping to 13 C1.

SOURCE

Med10 (C-2) is a mouse monoclonal antibody raised against amino acids 1-135 representing full length Med10 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.

Med10 (C-2) is available conjugated to agarose (sc-393450 AC), 500 µg/ 0.25 ml agarose in 1 ml, for IP; to HRP (sc-393450 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-393450 PE), fluorescein (sc-393450 FITC), Alexa Fluor® 488 (sc-393450 AF488), Alexa Fluor® 546 (sc-393450 AF546), Alexa Fluor® 594 (sc-393450 AF594) or Alexa Fluor® 647 (sc-393450 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-393450 AF680) or Alexa Fluor® 790 (sc-393450 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

STORAGE

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

APPLICATIONS

Med10 (C-2) is recommended for detection of Med10 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 Med10 siRNA (h): sc-91760, Med10 siRNA (m): sc-149346, Med10 shRNA Plasmid (h): sc-91760-SH, Med10 shRNA Plasmid (m): sc-149346-SH, Med10 shRNA (h) Lentiviral Particles: sc-91760-V and Med10 shRNA (m) Lentiviral Particles: sc-149346-V.

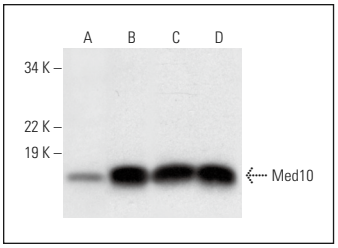
Molecular Weight of Med10: 16 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, HEK293 whole cell lysate: sc-45136 or MCF7 whole cell lysate: sc-2206.

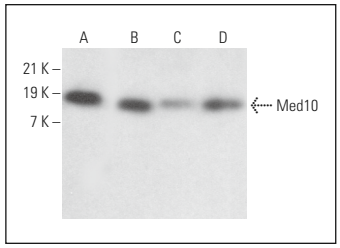
RECOMMENDED SUPPORT REAGENTS

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



Med10 (C-2): sc-393450. Western blot analysis of Med10 expression in Hep G2 (**A**), HeLa (**B**), HEK293 (**C**) and MCF7 (**D**) whole cell lysates.



Med10 (C-2): sc-393450. Western blot analysis of Med10 expression in c4 (**A**), PC-12 (**B**), Caki-1 (**C**) and KNRK (**D**) whole cell lysates.

SELECT PRODUCT CITATIONS

1. Wu, C.C., et al. 2021. Med10 drives the oncogenicity and refractory phenotype of bladder urothelial carcinoma through the upregulation of hsa-miR-590. Front. Oncol. 11: 744937.

RESEARCH USE

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