SANTA CRUZ BIOTECHNOLOGY, INC.

Med22 (D-10): sc-393738

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Med22 is a subunit of the RNA polymerase II (Pol II) transcriptional mediator complex. The mediator complex is a coactivator 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. Med22 (mediator complex subunit 22), also known as SURF5 (surfeit locus protein 5), is a ubiquitously expressed 200 amino acid nuclear protein that is one of several components of the mediator complex. There are two isoforms of Med22 that are produced as a result of alternative splicing events.

CHROMOSOMAL LOCATION

Genetic locus: MED22 (human) mapping to 9q34.2; Med22 (mouse) mapping to 2 A3.

SOURCE

Med22 (D-10) is a mouse monoclonal antibody raised against amino acids 1-132 mapping at the N-terminus of Med22 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.

Med22 (D-10) is available conjugated to agarose (sc-393738 AC), 500 µg/ 0.25 ml agarose in 1 ml, for IP; to HRP (sc-393738 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-393738 PE), fluorescein (sc-393738 FITC), Alexa Fluor® 488 (sc-393738 AF488), Alexa Fluor® 546 (sc-393738 AF546), Alexa Fluor® 594 (sc-393738 AF594) or Alexa Fluor® 647 (sc-393738 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-393738 AF680) or Alexa Fluor® 790 (sc-393738 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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APPLICATIONS

Med22 (D-10) is recommended for detection of Med22 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 Med22 siRNA (h): sc-92912, Med22 siRNA (m): sc-149351, Med22 shRNA Plasmid (h): sc-92912-SH, Med22 shRNA Plasmid (m): sc-149351-SH, Med22 shRNA (h) Lentiviral Particles: sc-92912-V and Med22 shRNA (m) Lentiviral Particles: sc-149351-V.

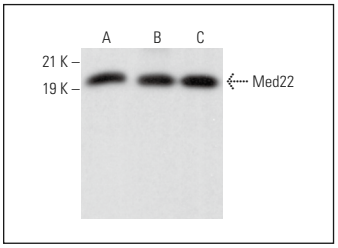
Molecular Weight of Med22: 22 kDa.

Positive Controls: HL-60 whole cell lysate: sc-2209, F9 cell lysate: sc-2245 or HeLa whole cell lysate: sc-2200.

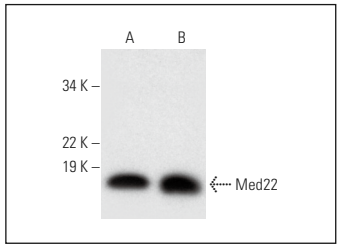
RECOMMENDED SUPPORT REAGENTS

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.

DATA



Med22 (D-10): sc-393738. Western blot analysis of Med22 expression in HL-60 (**A**), F9 (**B**) and C2C12 (**C**) whole cell lysates.



Med22 (D-10): sc-393738. Western blot analysis of Med22 expression in HL-60 (**A**) and HeLa (**B**) whole cell lysates.

SELECT PRODUCT CITATIONS

1. Donnio, L.M., et al. 2017. Med12-related XLID disorders are dose-dependent of immediate early genes (IEGs) expression. Hum. Mol. Genet. 26: 2062-2075.
2. Terabayashi, T. and Hashimoto, S. 2021. Increased unfolded protein responses caused by Med17 mutations. Neurogenetics 22: 353-357.
3. Yang, Y., et al. 2021. CDK7 blockade suppresses super-enhancer-associated oncogenes in bladder cancer. Cell. Oncol. 44: 871-887.
4. Richart, L., et al. 2022. XIST loss impairs mammary stem cell differentiation and increases tumorigenicity through Mediator hyperactivation. Cell 185: 2164-2183.e25.

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.