# SANTA CRUZ BIOTECHNOLOGY, INC.

# Med8 (A-5): sc-365960



# 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 multiprotein structure that functions as a bridge between regulatory proteins and Pol II, thereby regulating Pol II-dependent transcription. Med8 (mediator complex subunit 8), also known as arc32 (activator-recruited cofactor 32 kDa component), is a 268 amino acid protein that localizes to the nucleus and exists as a component of the mediator complex. Involved in the pathway of protein modification and ubiquitination, Med8 is involved in transcriptional regulation and may also recruit E3 ubiquitin-protein ligase complexes to proteins targeted for proteasomal degradation. Multiple isoforms of Med8 exist due to alternative splicing events.

# REFERENCES

- Jiang, Y.W., et al. 1998. Mammalian mediator of transcriptional regulation and its possible role as an end-point of signal transduction pathways. Proc. Natl. Acad. Sci. USA 95: 8538-8543.
- Näär, A.M., et al. 1999. Composite co-activator ARC mediates chromatindirected transcriptional activation. Nature 398: 828-832.
- Brower, C.S., et al. 2002. Mammalian mediator subunit mMed8 is an Elongin BC-interacting protein that can assemble with CUL2 and Rbx1 to reconstitute a ubiquitin ligase. Proc. Natl. Acad. Sci. USA 99: 10353-10358.
- Sato, S., et al. 2003. Identification of mammalian mediator subunits with similarities to yeast mediator subunits Srb5, Srb6, Med11, and Rox3. J. Biol. Chem. 278: 15123-15127.

# CHROMOSOMAL LOCATION

Genetic locus: MED8 (human) mapping to 1p34.2; Med8 (mouse) mapping to 4 D2.1.

# SOURCE

Med8 (A-5) is a mouse monoclonal antibody raised against amino acids 1-268 representing full length Med8 of human origin.

#### PRODUCT

Each vial contains 200  $\mu g \; lgG_1$  kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Med8 (A-5) is available conjugated to agarose (sc-365960 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-365960 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-365960 PE), fluorescein (sc-365960 FITC), Alexa Fluor<sup>®</sup> 488 (sc-365960 AF488), Alexa Fluor<sup>®</sup> 546 (sc-365960 AF546), Alexa Fluor<sup>®</sup> 594 (sc-365960 AF594) or Alexa Fluor<sup>®</sup> 647 (sc-365960 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor<sup>®</sup> 680 (sc-365960 AF680) or Alexa Fluor<sup>®</sup> 790 (sc-365960 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

# **STORAGE**

Store at 4° C, \*\*D0 NOT FREEZE\*\*. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

# APPLICATIONS

Med8 (A-5) is recommended for detection of Med8 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ 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 Med8 siRNA (h): sc-88195, Med8 siRNA (m): sc-149359, Med8 shRNA Plasmid (h): sc-88195-SH, Med8 shRNA Plasmid (m): sc-149359-SH, Med8 shRNA (h) Lentiviral Particles: sc-88195-V and Med8 shRNA (m) Lentiviral Particles: sc-149359-V.

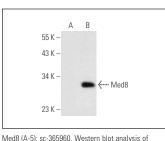
Molecular Weight of Med8: 29 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227 or Med8 (m): 293T Lysate: sc-125596.

# **RECOMMENDED SUPPORT REAGENTS**

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG K BP-HRP: sc-516102 or m-IgG K 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 K BP-FITC: sc-516140 or m-IgG K 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



Med8 (A-5): SC-365360. Western biot analysis of Med8 expression in non-transfected: sc-117752 (**A**) and mouse Med8 transfected: sc-125596 (**B**) 293T whole cell lysates.

#### SELECT PRODUCT CITATIONS

- 1. Ning, S., et al. 2019. MeI1c mediated monochromatic light-stimulated IGF-I synthesis through the intracellular  $G_{\alpha q}$ /PKC/ERK signaling pathway. Int. J. Mol. Sci. 20: 1682.
- Zhang, N., et al. 2020. MED13L integrates mediator-regulated epigenetic control into lung cancer radiosensitivity. Theranostics 10: 9378-9394.

#### **RESEARCH USE**

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

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