

Med25 (A-7): sc-393759



The Power to Question

BACKGROUND

In mammalian cells, transcription is regulated in part by high molecular weight coactivating 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. Med25 (mediator complex subunit 25), also known as P78, ACID1, ARC92 or PTOV2, is a 747 amino acid nuclear protein that functions as a component of the mediator complex. Expressed ubiquitously with highest levels in spleen, heart, brain, kidney, placenta and skeletal muscle, Med25 is one of several proteins that work in tandem and serve as a scaffold for the assembly of a functional preinitiation complex with Pol II and general transcription factors. Five isoforms of Med25 exist as a result of alternative splicing events.

REFERENCES

1. Naar, A.M., et al. 1999. Composite co-activator ARC mediates chromatin-directed transcriptional activation. *Nature* 398: 828-832.
2. Wang, C., et al. 2002. A prostate-derived cDNA that is mapped to human chromosome 19 encodes a novel protein. *Biochem. Biophys. Res. Commun.* 296: 281-287.
3. Online Mendelian Inheritance in Man, OMIM™. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 610197. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
4. Mittler, G., et al. 2003. A novel docking site on mediator is critical for activation by VP16 in mammalian cells. *EMBO J.* 22: 6494-6504.

CHROMOSOMAL LOCATION

Genetic locus: MED25 (human) mapping to 19q13.33; Med25 (mouse) mapping to 7 B4.

SOURCE

Med25 (A-7) is a mouse monoclonal antibody raised against amino acids 107-300 mapping within an internal region of Med25 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.

Med25 (A-7) is available conjugated to agarose (sc-393759 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-393759 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-393759 PE), fluorescein (sc-393759 FITC), Alexa Fluor® 488 (sc-393759 AF488), Alexa Fluor® 546 (sc-393759 AF546), Alexa Fluor® 594 (sc-393759 AF594) or Alexa Fluor® 647 (sc-393759 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-393759 AF680) or Alexa Fluor® 790 (sc-393759 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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RESEARCH USE

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

APPLICATIONS

Med25 (A-7) is recommended for detection of Med25 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 Med25 siRNA (h): sc-97106, Med25 siRNA (m): sc-149352, Med25 shRNA Plasmid (h): sc-97106-SH, Med25 shRNA Plasmid (m): sc-149352-SH, Med25 shRNA (h) Lentiviral Particles: sc-97106-V and Med25 shRNA (m) Lentiviral Particles: sc-149352-V.

Molecular Weight of Med25: 92 kDa.

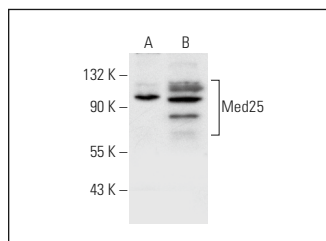
Positive Controls: IMR-32 nuclear extract: sc-2148, Ramos cell lysate: sc-2216 or MCF7 whole cell lysate: sc-2206.

RECOMMENDED SUPPORT REAGENTS

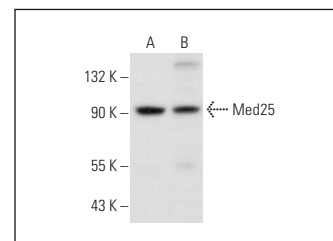
To ensure optimal results, the following support reagents are recommended:

- 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



Med25 (A-7): sc-393759. Western blot analysis of Med25 expression in IMR-32 nuclear extract (A) and MCF7 whole cell lysate (B).



Med25 (A-7): sc-393759. Western blot analysis of Med25 expression in Ramos (A) and F9 (B) whole cell lysates.

SELECT PRODUCT CITATIONS

1. Tang, M., et al. 2021. Genome-wide CRISPR screens reveal cyclin C as synthetic survival target of BRCA2. *Nucleic Acids Res.* 49: 7476-7491.
2. Pei, J., et al. 2021. Nuclear-localized human respiratory syncytial virus NS1 protein modulates host gene transcription. *Cell Rep.* 37: 109803.

STORAGE

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