

Med25 (N-15): sc-161112

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 multi-protein 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. Näär, 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.
5. Sato, S., et al. 2003. A mammalian homolog of *Drosophila melanogaster* transcriptional coactivator intersex is a subunit of the mammalian Mediator complex. *J. Biol. Chem.* 278: 49671-49674.
6. Yang, F., et al. 2004. The activator-recruited cofactor/Mediator coactivator subunit ARC92 is a functionally important target of the VP16 transcriptional-activator. *Proc. Natl. Acad. Sci. USA* 101: 2339-2344.

CHROMOSOMAL LOCATION

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

SOURCE

Med25 (N-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of Med25 of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-161112 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

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

APPLICATIONS

Med25 (N-15) is recommended for detection of Med25 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, 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); non cross-reactive with other Med family members.

Med25 (N-15) is also recommended for detection of Med25 in additional species, including canine, bovine and porcine.

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.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 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 donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

SELECT PRODUCT CITATIONS

1. Vijayalingam, S. and Chinnadurai, G. 2013. Adenovirus L-E1A activates transcription through mediator complex-dependent recruitment of the super elongation complex. *J. Virol.* 87: 3425-3434.
2. Pope, N.J. and Bresnick, E.H. 2013. Establishment of a cell-type-specific genetic network by the mediator complex component Med1. *Mol. Cell Biol.* 33: 1938-1955.

RESEARCH USE

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

PROTOCOLS

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



Try **Med25 (A-7): sc-393759**, our highly recommended monoclonal alternative to Med25 (N-15).