

CRSP77 (H-285): sc-48777

BACKGROUND

In mammalian cells, transcription is regulated in part by high molecular weight coactivating complexes that mediate signals between transcriptional activators and RNA polymerase. These complexes include CRSP (for cofactor required for Sp1 activation), which is required, in conjunction with TAF IIs, for transcriptional activation by Sp1. CRSP is ubiquitously expressed in various tissues and functions as a multimeric complex that consists of nine distinct subunits. Several members of the CRSP family share sequence similarity with multiple components of the yeast transcriptional mediator proteins, including CRSP150, which is related to yeast Rgr1, and CRSP70, which is similar to the elongation factor TFIIIS. CRSP77 and CRSP150 are also related to proteins within the putative murine mediator complex, while CRSP130 and CRSP34 are largely unrelated to either murine or yeast proteins. CRSP subunits also associate with larger multimeric co-activator complexes, including ARC/DRI, which binds directly to SREBP and nuclear hormone receptors to facilitate transcription, and with NAT, a polymerase II-interacting complex that represses activated transcription.

REFERENCES

1. Kim, Y.J., et al. 1994. A multiprotein mediator of transcriptional activation and its interaction with the C-terminal repeat domain of RNA polymerase II. *Cell* 77: 599-608.
2. Myers, L.C., et al. 1998. The Med proteins of yeast and their function through the RNA polymerase II carboxy-terminal domain. *Genes Dev.* 12: 45-54.
3. 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.
4. Ryu, S., et al. 1999. The transcriptional cofactor complex CRSP is required for activity of the enhancer-binding protein Sp1. *Nature* 397: 446-450.
5. Naar, A.M., et al. 1999. Composite co-activator ARC mediates chromatin-directed transcriptional activation. *Nature* 398: 828-832.

CHROMOSOMAL LOCATION

Genetic locus: MED17 (human) mapping to 11q21; Med17 (mouse) mapping to 9 A2.

SOURCE

CRSP77 (H-285) is a rabbit polyclonal antibody raised against amino acids 367-651 mapping at the C-terminus of CRSP77 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. Also available as TransCruz reagent for Gel Supershift and ChIP applications, sc-48777 X, 200 µg/0.1 ml.

STORAGE

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

APPLICATIONS

CRSP77 (H-285) is recommended for detection of CRSP77 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).

CRSP77 (H-285) is also recommended for detection of CRSP77 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for CRSP77 siRNA (h): sc-38575, CRSP77 siRNA (m): sc-38576, CRSP77 shRNA Plasmid (h): sc-38575-SH, CRSP77 shRNA Plasmid (m): sc-38576-SH, CRSP77 shRNA (h) Lentiviral Particles: sc-38575-V and CRSP77 shRNA (m) Lentiviral Particles: sc-38576-V.

CRSP77 (H-285) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of CRSP77: 77 kDa.

Positive Controls: K-562 nuclear extract: sc-2130, C32 nuclear extract: sc-2136 or Jurkat nuclear extract: sc-2132.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

SELECT PRODUCT CITATIONS

1. Belakavadi, M., et al. 2008. MED1 phosphorylation promotes its association with mediator: implications for nuclear receptor signaling. *Mol. Cell. Biol.* 28: 3932-3942.

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 **CRSP77 (2215C3a): sc-81238**, our highly recommended monoclonal alternative to CRSP77 (H-285).