

# CRSP34 (40.4): sc-101187

## 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 TAFII, 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 TFIIS. 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 coactivator 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

- 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.
- 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.
- 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.
- Ryu, S., et al. 1999. The transcriptional cofactor complex CRSP is required for activity of the enhancer-binding protein Sp1. *Nature* 397: 446-450.
- Ryu, S., et al. 1999. Purification of transcription cofactor complex CRSP. *Proc. Natl. Acad. Sci. USA* 96: 7137-7142.
- Andel, F. III, et al. 1999. Three-dimensional structure of the human TFIID-IIA-IIIB complex. *Science* 286: 2153-2156.
- Naar, A.M., et al. 1999. Composite co-activator ARC mediates chromatin-directed transcriptional activation. *Nature* 398: 828-832.

## CHROMOSOMAL LOCATION

Genetic locus: MED27 (human) mapping to 9q34.13; Med27 (mouse) mapping to 2 B.

## SOURCE

CRSP34 (40.4) is a mouse monoclonal antibody raised against recombinant CRSP34 of human origin.

## PRODUCT

Each vial contains 50 µg IgG<sub>1</sub> kappa light chain in 0.5 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

## APPLICATIONS

CRSP34 (40.4) is recommended for detection of CRSP34 of mouse, rat and human origin by Western Blotting (starting dilution to be determined by researcher, dilution range 1:100-1:5000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)] and solid phase ELISA (starting dilution to be determined by researcher, dilution range 1:100-1:5000).

Suitable for use as control antibody for CRSP34 siRNA (h): sc-38572, CRSP34 shRNA Plasmid (h): sc-38572-SH and CRSP34 shRNA (h) Lentiviral Particles: sc-38572-V.

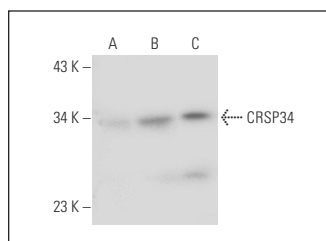
Molecular Weight of CRSP34: 35 kDa.

Positive Controls: HeLa nuclear extract: sc-2120, HeLa whole cell lysate: sc-2200 or CRSP34 (h): 293T Lysate: sc-116894.

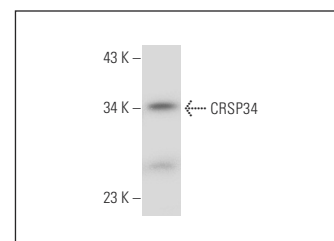
## RECOMMENDED SUPPORT REAGENTS

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, 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).

## DATA



CRSP34 (40.4): sc-101187. Western blot analysis of CRSP34 expression in non-transfected 293T: sc-117752 (A) and human CRSP34 transfected 293T: sc-116894 (B) whole cell lysates and HeLa nuclear extract (C).



CRSP34 (40.4): sc-101187. Western blot analysis of CRSP34 expression in HeLa nuclear extract.

## 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](http://www.scbt.com) for detailed protocols and support products.