

CRSP70 (F-5): sc-137196

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. 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.
- 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.
- 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.
- 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. and Tjian, R. 1999. Purification of transcription cofactor complex CRSP. *Proc. Natl. Acad. Sci. USA* 96: 7137-7142.

CHROMOSOMAL LOCATION

Genetic locus: MED26 (human) mapping to 19p13.11; Med26 (mouse) mapping to 8 B3.3.

SOURCE

CRSP70 (F-5) is a mouse monoclonal antibody raised against amino acids 373-600 mapping at the C-terminus of CRSP70 of human origin.

PRODUCT

Each vial contains 200 µg IgG_{2b} kappa light chain 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-137196 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

CRSP70 (F-5) is recommended for detection of CRSP70 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 CRSP70 siRNA (h): sc-38573, CRSP70 siRNA (m): sc-38574, CRSP70 shRNA Plasmid (h): sc-38573-SH, CRSP70 shRNA Plasmid (m): sc-38574-SH, CRSP70 shRNA (h) Lentiviral Particles: sc-38573-V and CRSP70 shRNA (m) Lentiviral Particles: sc-38574-V.

CRSP70 (F-5) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

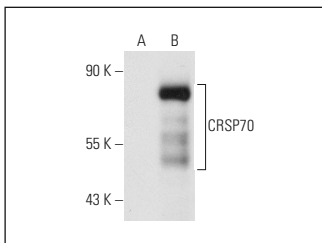
Molecular Weight of CRSP70: 70 kDa.

Positive Controls: CRSP70 (h): 293T Lysate: sc-112474.

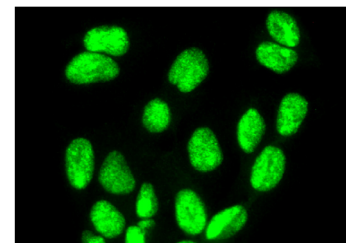
RECOMMENDED SUPPORT REAGENTS

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



CRSP70 (F-5): sc-137196. Western blot analysis of CRSP70 expression in non-transfected: sc-117752 (A) and human CRSP70 transfected: sc-112474 (B) 293T whole cell lysates.



CRSP70 (F-5): sc-137196. Immunofluorescence staining of formalin-fixed Hep G2 cells showing nuclear localization.

RESEARCH USE

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

PROTOCOLS

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