SANTA CRUZ BIOTECHNOLOGY, INC.

CRSP70 (G-11): sc-166614

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

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 TAFIIs, 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 co-activaor 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. 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.
3. 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.

CHROMOSOMAL LOCATION

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

SOURCE

CRSP70 (G-11) 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_1 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-166614 X, 200 µg/0.1 ml.

CRSP70 (G-11) is available conjugated to agarose (sc-166614 AC), 500 µg/ 0.25 ml agarose in 1 ml, for IP; to HRP (sc-166614 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-166614 PE), fluorescein (sc-166614 FITC), Alexa Fluor® 488 (sc-166614 AF488), Alexa Fluor® 546 (sc-166614 AF546), Alexa Fluor® 594 (sc-166614 AF594) or Alexa Fluor® 647 (sc-166614 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-166614 AF680) or Alexa Fluor® 790 (sc-166614 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

APPLICATIONS

CRSP70 (G-11) 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).

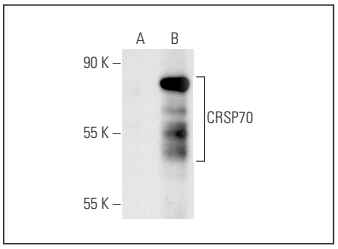
Suitable for use as control antibody for CRSP70 siRNA (h): sc-38573, CRSP70 siRNA (m): sc-38574, CRSP70 shRNA Plasmid (h): sc-38573-SH, CRSP70 shRNA Plasmid (m): sc-38574-SH, CRSP70 shRNA (h) Lentiviral Particles: sc-38573-V and CRSP70 shRNA (m) Lentiviral Particles: sc-38574-V.

CRSP70 (G-11) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

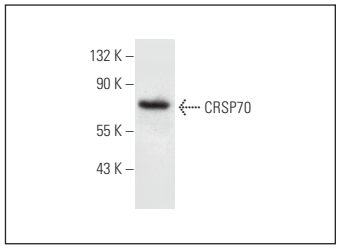
Molecular Weight of CRSP70: 70 kDa.

Positive Controls: CRSP70 (h): 293T Lysate: sc-112474 or Hep G2 nuclear extract: sc-364819.

DATA



CRSP70 (G-11): sc-166614. Western blot analysis of CRSP70 expression in non-transfected: sc-117752 (**A**) and human CRSP70 transfected: sc-112474 (**B**) 293T whole cell lysates.



CRSP70 (G-11): sc-166614. Western blot analysis of CRSP70 expression in Hep G2 nuclear extract.

SELECT PRODUCT CITATIONS

1. Wagner, L.M. and DeLuca, N.A. 2013. Temporal association of herpes simplex virus ICP4 with cellular complexes functioning at multiple steps in PolII transcription. PLoS ONE 8: e78242.
2. Albert, T.K., et al. 2016. The establishment of a hyperactive structure allows the tumour suppressor protein p53 to function through P-TEFβ during limited CDK9 linase inhibition. PLoS ONE 11: e0146648.

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 for detailed protocols and support products.