SANTA CRUZ BIOTECHNOLOGY, INC.

CRSP77 (2215C3a): sc-81238

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 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 coactivaor 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. Jiang, Y.W., Veschambre, P., Erdjument-Bromage, H., Tempst P., Conaway, J.W., Conaway, R.C. and Kornberg, R.D. 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.
2. Ryu, S., Zhou, S., Ladurner, A.G. and Tjian, R. 1999. The transcriptional cofactor complex CRSP is required for activity of the enhancer-binding protein Sp1. Nature 397: 446-450.
3. Ryu, S. and Tjian, R. 1999. Purification of transcription cofactor complex CRSP. Proc. Natl. Acad. Sci. USA 96: 7137-7142.
4. Andel, F. 3rd, Ladurner, A.G., Inouye, C., Tjian, R. and Nogales, E. 1999. Three-dimensional structure of the Human TFIID-IIA-IIB Complex. Science 286: 2153-2156.
5. Myers, L.C., Gustafsson, C.M., Bushnell, D.A., Lui, M., Erdjument-Bromage, H., Tempst, P. and Kornberg RD 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: MED17 (human) mapping to 11q21.

SOURCE

CRSP77 (2215C3a) is a mouse monoclonal antibody raised against a recombinant protein corresponding to an internal region of CRSP77 of human origin.

PRODUCT

Each vial contains 100 µg IgG_1 in 1.0 ml of PBS with < 0.1% sodium azide and 1.0% stabilizer protein.

PROTOCOLS

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

APPLICATIONS

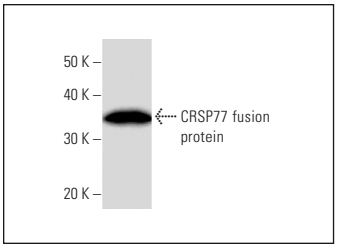
CRSP77 (2215C3a) is recommended for detection of CRSP77 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) and immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)].

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

Molecular Weight of CRSP77: 77 kDa.

Positive Controls: C32 nuclear extract: sc-2136, Jurkat nuclear extract: sc-2132 or A-431 nuclear extract: sc-2122.

DATA



CRSP77 (2215C3a): sc-81238. Western Blot analysis of human recombinant CRSP77 fusion protein.

STORAGE

For immediate and continuous use, store at 4° C for up to one month. For sporadic use, freeze in working aliquots in order to avoid repeated freeze/thaw cycles. If turbidity is evident upon prolonged storage, clarify solution by centrifugation.

RESEARCH USE

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