

CRSP77 (G-17): sc-12453

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 TFII5. 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.

CHROMOSOMAL LOCATION

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

SOURCE

CRSP77 (G-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-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-12453 X, 200 µg/0.1 ml.

Blocking peptide available for competition studies, sc-12453 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

CRSP77 (G-17) 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).

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 (G-17) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

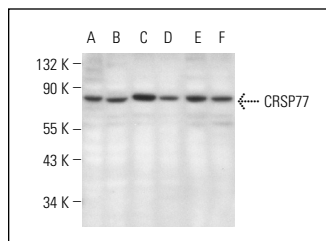
Molecular Weight of CRSP77: 77 kDa.

Positive Controls: NIH/3T3 nuclear extract: sc-2138, C32 nuclear extract: sc-2136 or HeLa nuclear extract: sc-2120.

STORAGE

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

DATA



CRSP77 (G-17): sc-12453. Western blot analysis of CRSP77 expression in NIH/3T3 (A), C32 (B), Jurkat (C), A-431 (D), K-562 (E) and HeLa (F) nuclear extracts.

SELECT PRODUCT CITATIONS

1. Wang, G., et al. 2005. Mediator requirement for both recruitment and postrecruitment steps in transcription initiation. *Mol. Cell* 17: 683-694.
2. Uhlmann, T. and Boeing, S. 2007. The VP16 activation domain establishes an active mediator lacking Cdk8 *in vivo*. *J. Biol. Chem.* 282: 2163-2173.
3. Belakavadi, M., et al. 2008. MED1 phosphorylation promotes its association with mediator: implications for nuclear receptor signaling. *Mol. Cell. Biol.* 28: 3932-3942.
4. Wolter, S., et al. 2008. c-Jun controls histone modifications, NFκB recruitment, and RNA polymerase II function to activate the ccl2 gene. *Mol. Cell. Biol.* 28: 4407-4423.
5. Ding, N., et al. 2009. MED19 and MED26 are synergistic functional targets of the RE1 silencing transcription factor in epigenetic silencing of neuronal gene expression. *J. Biol. Chem.* 284: 2648-2656.
6. Lester, J.T., et al. 2011. Herpes simplex virus 1 ICP4 forms complexes with TFIIID and mediator in virus-infected cells. *J. Virol.* 85: 5733-5744.
7. Esposito, G., et al. 2011. Protein network study of human AF4 reveals its central role in RNA Pol II-mediated transcription and in phosphorylation-dependent regulatory mechanisms. *Biochem. J.* 438: 121-131.
8. Wang, W., et al. 2013. Mediator MED23 regulates basal transcription *in vivo* via an interaction with P-TEFβ. *Transcription* 4: 39-51.

RESEARCH USE

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



Try **CRSP77 (2215C3a): sc-81238**, our highly recommended monoclonal alternative to CRSP77 (G-17).