SNAPC 190 (B-11): sc-515660



The Power to Question

BACKGROUND

TATA-box binding protein (TBP) interactions with TBP-associated factors (TAFs) are required for the transcription of RNA polymerases. One particular TBP-TAF complex, snRNA-activating protein complex (SNAPC), is unusual in that it regulates basal transcription of both RNA polymerase II and III by binding specifically to a non-TATA-box proximal sequence element (PSE). SNAPC consists of five subunits of varying size. SNAPC binds to Oct-1 and TBP, which are activators of snRNA and RNA polymerases, respectively. The POU domain of Oct-1 binds to SNAPC 190 and effectively recruits SNAPC to the PSE. The cooperative binding of SNAPC and Oct-1 to their respective sequence elements is mediated by a nucleosome positioned between the two sequence elements. SNAPC 19 mediates the assembly of the subunits to form a functional SNAPC transcription regulator. SNAPC 50 (also designated PTF β) contains two zinc finger motifs and binds to SNAPC 43 (also designated PTF γ) but not SNAPC 45 (PTF δ).

REFERENCES

- Sadowski, C.L., et al. 1993. Targeting TBP to a non-TATA box cis-regulatory element: a TBP-containing complex activates transcription from snRNA promoters through the PSE. Genes Dev. 7: 1535-1548.
- Henry, R.W., et al. 1995. A TBP-TAF complex required for transcription of human snRNA genes by RNA polymerase II and III. Nature 374: 653-666.
- Sadowski, C.L., et al. 1996. The SNAP45 subunit of the small nuclear RNA (snRNA) activating protein complex is required for RNA polymerase II and III snRNA gene transcription and interacts with the TATA box binding protein. Proc. Natl. Acad. Sci. USA 93: 4289-4293.
- Henry, R.W., et al. 1998. SNAP19 mediates the assembly of a functional core promoter complex (SNAPC) shared by RNA polymerases II and III. Genes Dev. 12: 2664-2672.

CHROMOSOMAL LOCATION

Genetic locus: SNAPC4 (human) mapping to 9q34.3; Snapc4 (mouse) mapping to 2 A3.

SOURCE

SNAPC 190 (B-11) is a mouse monoclonal antibody raised against amino acids 147-446 mapping within an internal region of SNAPC 190 of human origin.

PRODUCT

Each vial contains 200 $\mu g \ lgG_1$ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

SNAPC 190 (B-11) is available conjugated to agarose (sc-515660 AC), 500 μ g/ 0.25 ml agarose in 1 ml, for IP; to HRP (sc-515660 HRP), 200 μ g/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-515660 PE), fluorescein (sc-515660 FITC), Alexa Fluor® 488 (sc-515660 AF488), Alexa Fluor® 546 (sc-515660 AF546), Alexa Fluor® 594 (sc-515660 AF594) or Alexa Fluor® 647 (sc-515660 AF647), 200 μ g/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-515660 AF680) or Alexa Fluor® 790 (sc-515660 AF790), 200 μ g/ml, for Near-Infrared (NIR) WB, IF and FCM.

APPLICATIONS

SNAPC 190 (B-11) is recommended for detection of SNAPC 190 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g 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 SNAPC 190 siRNA (h): sc-38405, SNAPC 190 siRNA (m): sc-153649, SNAPC 190 shRNA Plasmid (h): sc-38405-SH, SNAPC 190 shRNA Plasmid (m): sc-153649-SH, SNAPC 190 shRNA (h) Lentiviral Particles: sc-38405-V and SNAPC 190 shRNA (m) Lentiviral Particles: sc-153649-V.

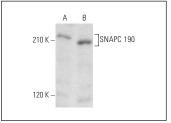
Molecular Weight of SNAPC 190: 190 kDa.

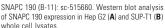
Positive Controls: SUP-T1 whole cell lysate: sc-364796, F9 cell lysate: sc-2245 or Hep G2 cell lysate: sc-2227.

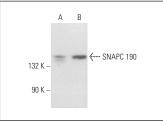
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-lgG κ BP-HRP: sc-516102 or m-lgG κ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz MarkerTM 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-lgG κ BP-FITC: sc-516140 or m-lgG κ 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







SNAPC 190 (B-11): sc-515660. Western blot analysis of SNAPC 190 expression in P19 (**A**) and F9 (**B**) whole cell lycates

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.

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