SANTA CRUZ BIOTECHNOLOGY, INC.

SNRPC (4H12): sc-101549

BACKGROUND

SNRPC (small nuclear ribonucleoprotein polypeptide C) is a 159 amino acid protein that localizes to the nucleus and contains one matrin-type zinc finger. Existing as a monomer, SNRPC associates with U1 SnRNP 70 and may play a role in ribonucleoprotein-related events. The gene encoding SNRPC maps to human chromosome 6, which contains 170 million base pairs and comprises nearly 6% of the human genome. Deletion of a portion of the q arm of chromosome 6 is associated with early onset intestinal cancer, suggesting the presence of a cancer susceptibility locus. Additionally, porphyria cutanea tarda, Parkinson's disease, Stickler syndrome and a susceptibility to bipolar disorder are all associated with genes that map to chromosome 6.

REFERENCES

1. Yamamoto, K., et al. 1988. Isolation and characterization of a complementary DNA expressing human U1 small nuclear ribonucleoprotein C polypeptide. J. Immunol. 140: 311-317.
2. Sillekens, P.T., et al. 1988. Human U1 SNRNP-specific C protein: complete cDNA and protein sequence and identification of a multigene family in mammals. Nucleic Acids Res. 16: 8307-8321.
3. Nelissen, R.L., et al. 1997. Cloning and characterization of two processed pseudogenes and the cDNA for the murine U1 SNRNP-specific protein C. Gene 184: 273-278.
4. Knoop, L.L. and Baker, S.J. 2000. The splicing factor U1C represses EWS/FLI-mediated transactivation. J. Biol. Chem. 275: 24865-24871.

CHROMOSOMAL LOCATION

Genetic locus: SNRPC (human) mapping to 6p21.31; Snrpc (mouse) mapping to 17 A3.3.

SOURCE

SNRPC (4H12) is a rat monoclonal antibody raised against full-length recombinant SNRPC of mouse origin.

PRODUCT

Each vial contains 200 µg IgG_{2a} in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

SNRPC (4H12) is available conjugated to agarose (sc-101549 AC), 500 µg/ 0.25 ml agarose in 1 ml, for IP; to HRP (sc-101549 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-101549 PE), fluorescein (sc-101549 FITC), Alexa Fluor® 488 (sc-101549 AF488), Alexa Fluor® 546 (sc-101549 AF546), Alexa Fluor® 594 (sc-101549 AF594) or Alexa Fluor® 647 (sc-101549 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-101549 AF680) or Alexa Fluor® 790 (sc-101549 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

STORAGE

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

APPLICATIONS

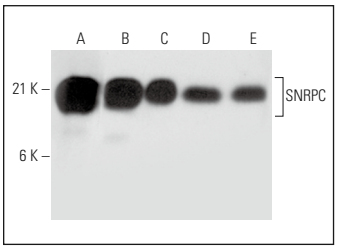
SNRPC (4H12) is recommended for detection of SNRPC of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 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 SNRPC siRNA (h): sc-95371, SNRPC siRNA (m): sc-153661, SNRPC shRNA Plasmid (h): sc-95371-SH, SNRPC shRNA Plasmid (m): sc-153661-SH, SNRPC shRNA (h) Lentiviral Particles: sc-95371-V and SNRPC shRNA (m) Lentiviral Particles: sc-153661-V.

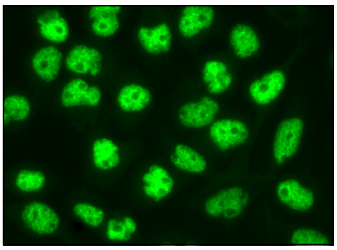
Molecular Weight of SNRPC: 18 kDa.

Positive Controls: K-562 nuclear extract: sc-2130, Jurkat nuclear extract: sc-2132 or HeLa nuclear extract: sc-2120.

DATA



SNRPC (4H12): sc-101549. Western blot analysis of SNRPC expression in K-562 (**A**), HeLa (**B**) and Jurkat (**C**) nuclear extracts and ES-2 (**D**) and c4 (**E**) whole cell lysates.



SNRPC (4H12): sc-101549. Immunofluorescence staining of formalin-fixed A-431 cells showing nuclear localization.

SELECT PRODUCT CITATIONS

1. Li, Z., et al. 2015. Exon-intron circular RNAs regulate transcription in the nucleus. Nat. Struct. Mol. Biol. 22: 256-264.
2. Llorian, M., et al. 2016. The alternative splicing program of differentiated smooth muscle cells involves concerted non-productive splicing of post-transcriptional regulators. Nucleic Acids Res. 44: 8933-8950.
3. Zhang, Y., et al. 2021. SNRPC promotes hepatocellular carcinoma cell motility by inducing epithelial-mesenchymal transition. FEBS Open Bio 11: 1757-1770.
4. Rovira, E., et al. 2022. U1A is a positive regulator of the expression of heterologous and cellular genes involved in cell proliferation and migration. Mol. Ther. Nucleic Acids 28: 831-846.
5. Feng, Q., et al. 2023. The U1 antisense morpholino oligonucleotide (AMO) disrupts U1 snRNP structure to promote intronic PCPA modification of pre-mRNAs. J. Biol. Chem. 299: 104854.

RESEARCH USE

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