SANTA CRUZ BIOTECHNOLOGY, INC.

SPATA10 (C-11): sc-390306

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

SPATA10, also known as SPATS2 (spermatogenesis-associated serine-rich protein 2), SCR59 (serine-rich spermatocytes and round spermatid 59 kDa protein) or p59scr, is a 545 amino acid cytoplasmic protein that belongs to the SPATS2 family. The gene encoding SPATA10 maps to human chromosome 12q13.12 and mouse chromosome 15 F1. Chromosome 12 makes up about 4.5% of the human genome and is linked to a number of skeletal deformities, including hypochondrogenesis, achondrogenesis and Kniest dysplasia. Noonan syndrome, which includes heart and facial developmental defects among the primary symptoms, is caused by a mutant form of PTPN11 gene product, SH-PTP2. Chromosome 12 is also home to a homeobox gene cluster, which encodes crucial transcription factors for morphogenesis, and the natural killer complex gene cluster, encoding C-type lectin proteins which mediate the NK cell response to MHC I interaction. Trisomy 12p leads to facial development defects, seizure disorders and a host of other symptoms which vary in severity depending on the extent of mosaicism. It is most severe in cases of complete trisomy.

CHROMOSOMAL LOCATION

Genetic locus: SPATS2 (human) mapping to 12q13.12; Spats2 (mouse) mapping to 15 F1.

SOURCE

SPATA10 (C-11) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 135-175 within an internal region of SPATA10 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.

SPATA10 (C-11) is available conjugated to agarose (sc-390306 AC), 500 µg/ 0.25 ml agarose in 1 ml, for IP; to HRP (sc-390306 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-390306 PE), fluorescein (sc-390306 FITC), Alexa Fluor® 488 (sc-390306 AF488), Alexa Fluor® 546 (sc-390306 AF546), Alexa Fluor® 594 (sc-390306 AF594) or Alexa Fluor® 647 (sc-390306 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-390306 AF680) or Alexa Fluor® 790 (sc-390306 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-390306 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

STORAGE

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

PROTOCOLS

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

APPLICATIONS

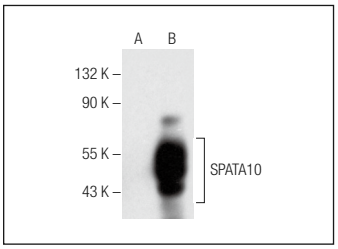
SPATA10 (C-11) is recommended for detection of SPATA10 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (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 SPATA10 siRNA (h): sc-95919, SPATA10 siRNA (m): sc-153711, SPATA10 shRNA Plasmid (h): sc-95919-SH, SPATA10 shRNA Plasmid (m): sc-153711-SH, SPATA10 shRNA (h) Lentiviral Particles: sc-95919-V and SPATA10 shRNA (m) Lentiviral Particles: sc-153711-V.

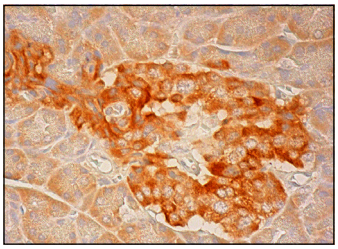
Molecular Weight of SPATA10: 60 kDa.

Positive Controls: SPATA10 (m): 293T Lysate: sc-123734.

DATA



SPATA10 (C-11): sc-390306. Western blot analysis of SPATA10 expression in non-transfected: sc-117752 (**A**) and mouse SPATA10 transfected: sc-123734 (**B**) 293T whole cell lysates.



SPATA10 (C-11): sc-390306. Immunoperoxidase staining of formalin fixed, paraffin-embedded human pancreas tissue showing cytoplasmic staining of exocrine glandular cells and Islets of Langerhans.

SELECT PRODUCT CITATIONS

1. Damas, N.D., et al. 2016. SNHG5 promotes colorectal cancer cell survival by counteracting STAU1-mediated mRNA destabilization. Nat. Commun. 7: 13875.
2. Dong, G., et al. 2020. SPATS2, negatively regulated by miR-145-5p, promotes hepatocellular carcinoma progression through regulating cell cycle. Cell Death Dis. 11: 837.
3. Chen, L., et al. 2021. Inhibition of SPATS2 suppresses proliferation and invasion of hepatocellular carcinoma cells through TRIM44-STAT3 signaling pathway. J. Cancer 12: 89-98.

RESEARCH USE

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