SPATA10 (C-11): sc-390306

**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 hypochondroplasia, 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 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® 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).

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**STORAGE**

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

**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 shRNA (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**


**RESEARCH USE**

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

**PROTOCOLS**

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