

SPATA17 (D-8): sc-515063

BACKGROUND

SPATA17 (spermatogenesis-associated protein 17), also known as IQCH (IQ motif containing H), is a 361 amino acid cytoplasmic protein that contains 3 IQ domains. The gene that encodes SPATA17 consists of more than 240,000 bases and maps to human chromosome 1q41. Chromosome 1 is the largest human chromosome spanning about 260 million base pairs and making up approximately 8% of the human genome. There are about 3,000 genes on chromosome 1, and considering the great number of genes there are also a large number of diseases associated with chromosome 1. Notably, the rare aging disease Hutchinson-Gilford progeria is associated with the LMNA gene which encodes lamin A. When defective, the LMNA gene product can build up in the nucleus and cause characteristic nuclear blebs. The MUTYH gene is located on chromosome 1 and is partially responsible for familial adenomatous polyposis. Stickler syndrome, Parkinsons, Gaucher disease and Usher syndrome are also associated with chromosome 1.

REFERENCES

1. Tayebi, N., et al. 2001. Gaucher disease and parkinsonism: a phenotypic and genotypic characterization. *Mol. Genet. Metab.* 73: 313-321.
2. Plasilova, M., et al. 2004. Exclusion of an extracolonic disease modifier locus on chromosome 1p33-36 in a large Swiss familial adenomatous polyposis kindred. *Eur. J. Hum. Genet.* 12: 365-371.
3. Deng, Y., et al. 2006. Expression and identification of a novel apoptosis gene Spata17 (MSRG-11) in mouse spermatogenic cells. *Acta Biochim. Biophys. Sin.* 38: 37-45.

CHROMOSOMAL LOCATION

Genetic locus: SPATA17 (human) mapping to 1q41; Spata17 (mouse) mapping to 1 H5.

SOURCE

SPATA17 (D-8) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 243-266 within an internal region of SPATA17 of human origin.

PRODUCT

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

SPATA17 (D-8) is available conjugated to agarose (sc-515063 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-515063 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-515063 PE), fluorescein (sc-515063 FITC), Alexa Fluor® 488 (sc-515063 AF488), Alexa Fluor® 546 (sc-515063 AF546), Alexa Fluor® 594 (sc-515063 AF594) or Alexa Fluor® 647 (sc-515063 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-515063 AF680) or Alexa Fluor® 790 (sc-515063 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-515063 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

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APPLICATIONS

SPATA17 (D-8) is recommended for detection of SPATA17 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for SPATA17 siRNA (h): sc-88103, SPATA17 siRNA (m): sc-153714, SPATA17 shRNA Plasmid (h): sc-88103-SH, SPATA17 shRNA Plasmid (m): sc-153714-SH, SPATA17 shRNA (h) Lentiviral Particles: sc-88103-V and SPATA17 shRNA (m) Lentiviral Particles: sc-153714-V.

Molecular Weight (predicted) of SPATA17: 43 kDa.

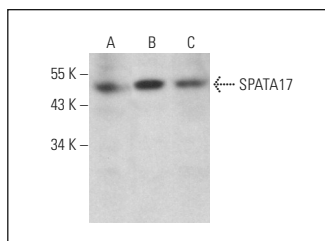
Molecular Weight (observed) of SPATA17: 55 kDa.

Positive Controls: NTERA-2 cl.D1 whole cell lysate: sc-364181, HT-1080 whole cell lysate: sc-364183 or human testis extract: sc-363781.

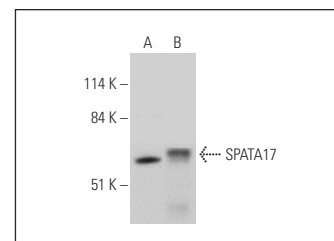
RECOMMENDED SUPPORT REAGENTS

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



SPATA17 (D-8): sc-515063. Western blot analysis of SPATA17 expression in HT-1080 (A), F9 (B) and C2C12 (C) whole cell lysates.



SPATA17 (D-8): sc-515063. Western blot analysis of SPATA17 expression in NTERA-2 cl.D1 whole cell lysate (A) and human testis tissue extract (B).

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.