

Strumpellin (B-10): sc-377146

BACKGROUND

Strumpellin, also known as SPG8 or KIAA0196, is a 1,159 amino acid ubiquitously expressed protein that is present at higher levels in skeletal muscle and prostate cancer cells, suggesting a role in tumorigenesis. Defects in the gene encoding Strumpellin are the cause of autosomal dominant spastic paraplegia type 8 (SPG8), characterized by the slow and gradual weakening of the legs, as well as muscle spasms, stiffness and incontinence. The gene encoding Strumpellin maps to human chromosome 8, which consists of nearly 146 million base pairs, houses more than 800 genes and is associated with a variety of diseases and malignancies. Schizophrenia, bipolar disorder, Trisomy 8, Pfeiffer syndrome, congenital hypothyroidism, Waardenburg syndrome and some leukemias and lymphomas are thought to occur as a result of defects in specific genes that map to chromosome 8.

REFERENCES

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- van Duin, M., et al. 2005. High-resolution array comparative genomic hybridization of chromosome arm 8q: evaluation of genetic progression markers for prostate cancer. *Genes Chromosomes Cancer* 44: 438-449.
- Valdmanis, P.N., et al. 2007. Mutations in the KIAA0196 gene at the SPG8 locus cause hereditary spastic paraplegia. *Am. J. Hum. Genet.* 80: 152-161.
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CHROMOSOMAL LOCATION

Genetic locus: WASHC5 (human) mapping to 8q24.13; Washc5 (mouse) mapping to 15 D1.

SOURCE

Strumpellin (B-10) is a mouse monoclonal antibody raised against amino acids 1-300 mapping at the N-terminus of Strumpellin of human origin.

PRODUCT

Each vial contains 200 µg IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Strumpellin (B-10) is available conjugated to agarose (sc-377146 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-377146 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-377146 PE), fluorescein (sc-377146 FITC), Alexa Fluor® 488 (sc-377146 AF488), Alexa Fluor® 546 (sc-377146 AF546), Alexa Fluor® 594 (sc-377146 AF594) or Alexa Fluor® 647 (sc-377146 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-377146 AF680) or Alexa Fluor® 790 (sc-377146 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

APPLICATIONS

Strumpellin (B-10) is recommended for detection of Strumpellin 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 Strumpellin siRNA (h): sc-77748, Strumpellin siRNA (r): sc-270062, Strumpellin shRNA Plasmid (h): sc-77748-SH, Strumpellin shRNA Plasmid (r): sc-270062-SH, Strumpellin shRNA (h) Lentiviral Particles: sc-77748-V and Strumpellin shRNA (r) Lentiviral Particles: sc-270062-V.

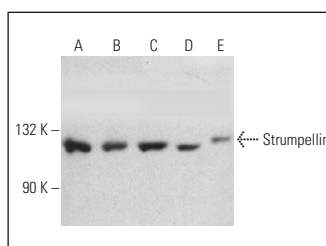
Molecular Weight of Strumpellin: 134 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, Ramos cell lysate: sc-2216 or DU 145 cell lysate: sc-2268.

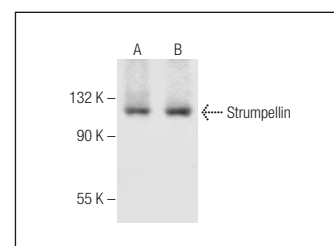
RECOMMENDED SUPPORT REAGENTS

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



Strumpellin (B-10): sc-377146. Western blot analysis of Strumpellin expression in DU 145 (A), HeLa (B), Hep G2 (C) and AMJ2-C8 (D) whole cell lysates and rat lung tissue extract (E).



Strumpellin (B-10): sc-377146. Western blot analysis of Strumpellin expression in DU 145 (A) and Ramos (B) whole cell lysates.

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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