

# Strumpellin (H-300): sc-134888

## 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: KIAA0196 (human) mapping to 8q24.13; E430025E21Rik (mouse) mapping to 15 D1.

## SOURCE

Strumpellin (H-300) is a rabbit polyclonal antibody raised against amino acids 1-300 mapping at the N-terminus of Strumpellin of human origin.

## PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

## 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.

## APPLICATIONS

Strumpellin (H-300) is recommended for detection of Strumpellin 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).

Strumpellin (H-300) is also recommended for detection of Strumpellin in additional species, including equine, canine, bovine and avian.

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: Hep G2 cell lysate: sc-2227, HeLa whole cell lysate: sc-2200 or Ramos cell lysate: sc-2216.

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

## PROTOCOLS

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Try **Strumpellin (B-10): sc-377146**, our highly recommended monoclonal alternative to Strumpellin (H-300).