

SPT7L (F-5): sc-514548

BACKGROUND

SPT7L (suppressor of Ty 7-like), also known as STAGA complex 65 subunit γ (STAF65G), STAF65 or SUPT7H, is a 414 amino acid sumoylated nuclear protein. SPT7L is a component of the STAGA transcription coactivator-HAT complex, which includes the proteins SPT3, GCN5, TAF6L, TAF5L, TAF II p32, TAF II p20, TAF II p30 and ADA3. SPT7L is highly expressed in thymus, adenocarcinomas and gliomas, with lower levels found in small intestine, skeletal muscle, stomach and esophageal cancers. The gene that encodes SPT7L maps to human chromosome 2, which is the second largest human chromosome, consisting of 237 million bases and encoding over 1,400 genes. A number of genetic diseases are linked to genes on chromosome 2. Harlequin ichthyosis, a rare and morbid skin deformity, is associated with mutations in the ABCA12 gene. The lipid metabolic disorder sitosterolemia is associated with ABCG5 and ABCG8. An extremely rare recessive genetic disorder, Alström syndrome is due to mutations in the ALMS1 gene. Interestingly, chromosome 2 contains what appears to be a vestigial second centromere and vestigial telomeres which gives credence to the hypothesis that human chromosome 2 is the result of an ancient fusion of two ancestral chromosomes seen in modern form today in apes.

REFERENCES

1. Ijdo, J.W., et al. 1991. Origin of human chromosome 2: an ancestral telomere-telomere fusion. *Proc. Natl. Acad. Sci. USA* 88: 9051-9055.
2. Avarello, R., et al. 1992. Evidence for an ancestral alphoid domain on the long arm of human chromosome 2. *Hum. Genet.* 89: 247-249.
3. Nishizaka, S., et al. 2000. A new tumor-rejection antigen recognized by cytotoxic T lymphocytes infiltrating into a lung adenocarcinoma. *Cancer Res.* 60: 4830-4837.

CHROMOSOMAL LOCATION

Genetic locus: SUPT7L (human) mapping to 2p23.3; Supt7l (mouse) mapping to 5 B1.

SOURCE

SPT7L (F-5) is a mouse monoclonal antibody raised against amino acids 182-414 mapping at the C-terminus of SPT7L of human origin.

PRODUCT

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

SPT7L (F-5) is available conjugated to agarose (sc-514548 AC), 500 μ g/0.25 ml agarose in 1 ml, for IP; to HRP (sc-514548 HRP), 200 μ g/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-514548 PE), fluorescein (sc-514548 FITC), Alexa Fluor® 488 (sc-514548 AF488), Alexa Fluor® 546 (sc-514548 AF546), Alexa Fluor® 594 (sc-514548 AF594) or Alexa Fluor® 647 (sc-514548 AF647), 200 μ g/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-514548 AF680) or Alexa Fluor® 790 (sc-514548 AF790), 200 μ g/ml, for Near-Infrared (NIR) WB, IF and FCM.

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APPLICATIONS

SPT7L (F-5) is recommended for detection of SPT7L of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g 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 SPT7L siRNA (h): sc-94413, SPT7L siRNA (m): sc-153803, SPT7L shRNA Plasmid (h): sc-94413-SH, SPT7L shRNA Plasmid (m): sc-153803-SH, SPT7L shRNA (h) Lentiviral Particles: sc-94413-V and SPT7L shRNA (m) Lentiviral Particles: sc-153803-V.

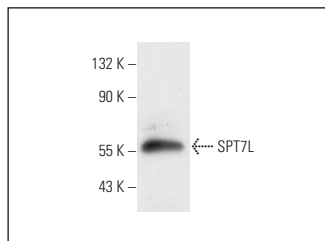
Molecular Weight of SPT7L: 60 kDa.

Positive Controls: U-251-MG whole cell lysate: sc-364176 or T98G cell lysate: sc-2294.

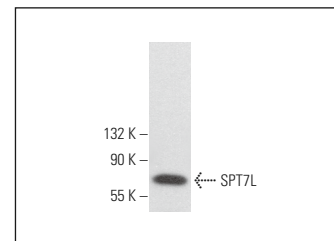
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ 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-IgG κ BP-FITC: sc-516140 or m-IgG κ 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



SPT7L (F-5): sc-514548. Western blot analysis of SPT7L expression in U-251-MG whole cell lysate.



SPT7L (F-5): sc-514548. Western blot analysis of SPT7L expression in T98G whole cell lysate.

SELECT PRODUCT CITATIONS

1. Herbst, D.A., et al. 2021. Structure of the human SAGA coactivator complex. *Nat. Struct. Mol. Biol.* 28: 989-996.

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.