

Spir-1 (K-19): sc-85162

BACKGROUND

Spir-1 (spire homolog 1) is a 756 amino acid protein that localizes to the cytoskeleton, as well as to the perinuclear region of the cytoplasm, and contains one KIND domain and 2 WH2 domains. Functioning as an actin nucleation factor, Spir-1 assists in new filament growth and is involved in vesicle transport processes, effectively providing a link between intracellular transport and actin organization. Multiple isoforms of Spir-1 exist due to alternative splicing events. The gene encoding Spir-1 maps to human chromosome 18, which houses over 300 protein-coding genes and contains nearly 76 million bases. There are a variety of diseases associated with defects in chromosome 18-localized genes, some of which include Trisomy 18 (also known as Edwards syndrome), Niemann-Pick disease, hereditary hemorrhagic telangiectasia, erythropoietic protoporphyria and follicular lymphomas.

REFERENCES

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3. Schumacher, N., Borawski, J.M., Leberfinger, C.B., Gessler, M. and Kerkhoff, E. 2004. Overlapping expression pattern of the actin organizers Spir-1 and formin-2 in the developing mouse nervous system and the adult brain. *Gene Expr. Patterns* 4: 249-255.
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CHROMOSOMAL LOCATION

Genetic locus: SPIRE1 (human) mapping to 18p11.21; Spire1 (mouse) mapping to 18 E1.

SOURCE

Spir-1 (K-19) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an internal region of Spir-1 of human origin.

PRODUCT

Each vial contains 100 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-85162 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

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

APPLICATIONS

Spir-1 (K-19) is recommended for detection of Spir-1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, 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).

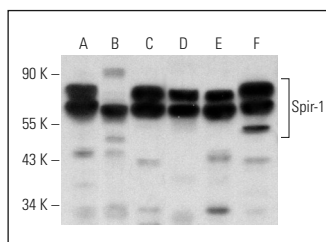
Spir-1 (K-19) is also recommended for detection of Spir-1 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for Spir-1 siRNA (h): sc-76567, Spir-1 siRNA (m): sc-153771, Spir-1 shRNA Plasmid (h): sc-76567-SH, Spir-1 shRNA Plasmid (m): sc-153771-SH, Spir-1 shRNA (h) Lentiviral Particles: sc-76567-V and Spir-1 shRNA (m) Lentiviral Particles: sc-153771-V.

Molecular Weight of Spir-1: 86 kDa.

Positive Controls: SK-OV-3 whole cell lysate: sc-364229, Jurkat whole cell lysate: sc-2204 or Hep G2 cell lysate: sc-2227.

DATA



Spir-1 (K-19): sc-85162. Western blot analysis of Spir-1 expression in Hep G2 (A), Jurkat (B), U-251-MG (C), ARPE-19 (D), RPE-J (E) and SK-OV-3 (F) whole cell lysates.

RESEARCH USE

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

PROTOCOLS

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



Try **Spir-1 (4C5): sc-517039** or **Spir-1 (H-1): sc-515448**, our highly recommended monoclonal alternatives to Spir-1 (K-19).