

ESPNL (K-18): sc-246529

BACKGROUND

ESPNL (espin-like protein) is a 1,005 amino acid protein that contains 9 ANK repeats and exists as 3 alternatively spliced isoforms. The gene encoding ESPNL maps to human chromosome 2q37.3 and mouse chromosome 1 D. Chromosome 2 is the second largest human chromosome, which consists of 237 million bases, encodes over 1,400 genes and makes up approximately 8% of the human genome. 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 known as Alstrom 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

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CHROMOSOMAL LOCATION

Genetic locus: ESPNL (human) mapping to 2q37.3; Espnl (mouse) mapping to 1 D.

SOURCE

ESPNL (K-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of ESPNL of human origin.

RESEARCH USE

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

PRODUCT

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

Blocking peptide available for competition studies, sc-246529 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

ESPNL (K-18) is recommended for detection of ESPNL of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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).

ESPNL (K-18) is also recommended for detection of ESPNL in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for ESPNL siRNA (h): sc-94307, ESPNL siRNA (m): sc-144949, ESPNL shRNA Plasmid (h): sc-94307-SH, ESPNL shRNA Plasmid (m): sc-144949-SH, ESPNL shRNA (h) Lentiviral Particles: sc-94307-V and ESPNL shRNA (m) Lentiviral Particles: sc-144949-V.

Molecular Weight of ESPNL isoforms 1/2/3: 108/103/69 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

STORAGE

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

PROTOCOLS

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