

Sp9 (G-18): sc-324339

BACKGROUND

Sp9 is a 484 amino acid nuclear protein that contains 3 C₂H₂-type zinc fingers and belongs to the Sp1 C₂H₂-type zinc-finger protein family. As a transcription factor that plays a key role in limb development, Sp9 positively regulates FGFR3 expression in the apical ectodermal ridge (AER), which contributes to limb outgrowth in embryos. The gene that encodes Sp9 consists of close to 4,000 bases and maps to human chromosome 2q31.1. Consisting of 237 million bases, chromosome 2 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, Alström syndrome, is due to mutations in the ALMS1 gene.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: SP9 (human) mapping to 2q31.1; Sp9 (mouse) mapping to 2 C3.

SOURCE

Sp9 (G-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Sp9 of human origin.

STORAGE

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

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-324339 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Sp9 (G-18) is recommended for detection of Sp9 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); non cross-reactive with other Sp family members.

Sp9 (G-18) is also recommended for detection of Sp9 in additional species, including canine and bovine.

Suitable for use as control antibody for Sp9 siRNA (m): sc-153693, Sp9 shRNA Plasmid (m): sc-153693-SH and Sp9 shRNA (m) Lentiviral Particles: sc-153693-V.

Molecular Weight of Sp9: 49 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.

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.