

R-Spondin4 (H-70): sc-98333

BACKGROUND

Roof plate-specific spondins (R-Spondins) are secreted proteins that possess a Furin-like cysteine-rich domain and are involved in regulating β -catenin function. R-Spondin4, also known as RSP04, is a 234 amino acid secreted protein that, characteristic of R-Spondins, contains one Furin-like repeat and one TSP type-1 domain. R-Spondin4 interacts with heparin and is able to activate the β -catenin signaling cascade, possibly via control of the Wnt/ β -catenin signaling pathway. Defects in the gene encoding R-Spondin4 are . by severe hypoplasia (underdevelopment) of fingernails and toenails. R-Spondin4 exists as multiple alternatively spliced isoforms that are encoded by a gene which maps to human chromosome 20.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: RSP04 (human) mapping to 20p13; Rspo4 (mouse) mapping to 2 G3.

SOURCE

R-Spondin4 (H-70) is a rabbit polyclonal antibody raised against amino acids 77-145 mapping within an internal region of R-Spondin4 of human origin.

PRODUCT

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

APPLICATIONS

R-Spondin4 (H-70) is recommended for detection of R-Spondin4 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).

R-Spondin4 (H-70) is also recommended for detection of R-Spondin4 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for R-Spondin4 siRNA (h): sc-76309, R-Spondin4 siRNA (m): sc-152620, R-Spondin4 shRNA Plasmid (h): sc-76309-SH, R-Spondin4 shRNA Plasmid (m): sc-152620-SH, R-Spondin4 shRNA (h) Lentiviral Particles: sc-76309-V and R-Spondin4 shRNA (m) Lentiviral Particles: sc-152620-V.

Molecular Weight of R-Spondin4: 26 kDa.

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.

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.

PROTOCOLS

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