



R-Spondin3 (K-12): sc-107985

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-Spondin3, also known as RSP03, PWTSR, THSD2 or CRISTIN1, is a 272 amino acid secreted protein that contains one TSP type-1 domain and two furin-like repeats. Expressed ubiquitously with particularly high levels present in placenta, thymus and lymph node, R-Spondin3 functions to activate the β -catenin signaling cascade, ultimately leading to TCF-dependent gene activation. Multiple isoforms of R-Spondin3 exist due to alternative splicing events. The gene encoding R-Spondin3 maps to human chromosome 6, which contains 170 million base pairs and comprises nearly 6% of the human genome. Deletion of a portion of the q arm of chromosome 6 is associated with early onset intestinal cancer, suggesting the presence of a cancer susceptibility locus. Additionally, Porphyria cutanea tarda, Parkinson's disease, Stickler syndrome and a susceptibility to bipolar disorder are all associated with genes that map to chromosome 6.

REFERENCES

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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.

CHROMOSOMAL LOCATION

Genetic locus: RSP03 (human) mapping to 6q22.33; Rspo3 (mouse) mapping to 10 A4.

SOURCE

R-Spondin3 (K-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of R-Spondin3 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.

Blocking peptide available for competition studies, sc-107985 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

R-Spondin3 (K-12) is recommended for detection of R-Spondin3 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).

Suitable for use as control antibody for R-Spondin3 siRNA (h): sc-95265, R-Spondin3 siRNA (m): sc-152619, R-Spondin3 shRNA Plasmid (h): sc-95265-SH, R-Spondin3 shRNA Plasmid (m): sc-152619-SH, R-Spondin3 shRNA (h) Lentiviral Particles: sc-95265-V and R-Spondin3 shRNA (m) Lentiviral Particles: sc-152619-V.

Molecular Weight of R-Spondin3: 31 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.

PROTOCOLS

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