

SPR-5 (C-95): sc-98749

BACKGROUND

Presenilins are components of a protease complex that functions to cleave Notch receptors and the Amyloid precursor protein implicated in Alzheimer's disease. Mutations in Presenilin 1 and Presenilin 2 are the most common cause of familial early-onset Alzheimer's disease. In *C. elegans*, the presenilin proteins are known as HOP-1 and SEL-12. A mutation in the SEL-12 presenilin protein is associated with a highly penetrant egg-laying defect caused by a reduction in Notch signaling. The transgenic expression of HOP-1 can rescue a SEL-12 mutant from the egg-laying defect. SPR-5 (suppressor of presenilin defect family member 5) is a 770 amino acid protein that, when mutated, efficiently suppresses the egg-laying defect of the SEL-12 mutant by releasing the repression of HOP-1 expression during developmental stages. SPR-5 is similar to the mammalian PAO protein and is believed to associate with SPR-1, a *C. elegans* homolog of CoREST, in a CoREST-like co-repressor complex that functions in transcriptional repression.

REFERENCES

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SOURCE

SPR-5 (C-95) is a rabbit polyclonal antibody raised against amino acids 676-770 mapping at the C-terminus of SPR-5 of *C. elegans* origin.

PRODUCT

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

APPLICATIONS

SPR-5 (C-95) is recommended for detection of SPR-5 of *Caenorhabditis elegans* origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg 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).

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.