



GPR-1 (cA-20): sc-32691

BACKGROUND

The receptor independent G protein regulator 1, GPR-1, is involved in asymmetric cell division in *C. elegans*. GPR-1 acts in conjunction with GPR-2 and the G alphas GOA-1 and GPA-16 to mediate spindle fiber positioning and generation of pulling forces necessary for cell division. GPR-1 contains a GoLoco/G protein regulatory motif, a 19-amino-acid sequence, that interacts with GDP-bound G α subunits and acts as a guanine nucleotide dissociation inhibitor. In addition, GPR-1 associates with the C-terminal region of LIN-5, a coiled-coil protein that localizes the GPR proteins to the cell cortex and spindles. RIC-8 also interacts with GPR-1 and GPR-2, and may contribute to the interaction of the GPR proteins with the G α proteins via dissociation of the G $\beta\gamma$ subunit from the G α subunit. The proteins PAR-3 and LET-99 also play a role in the asymmetric localization of the GPR-1 and GPR-2 proteins.

REFERENCES

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SOURCE

GPR-1 (cA-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of GPR-1 of *C. elegans* 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-32691 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

GPR-1 (cA-20) is recommended for detection of GPR-1 of *C. elegans* 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).

Molecular Weight of GPR-1: 60 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.

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.