

SRCR (B4487M): sc-73629

BACKGROUND

The Aggregation Factor has been widely studied in species of Sponge, including *Geodia cydonium*. The marine sponge *Geodia cydonium* belongs to the phylum Porifera and exists as a multi-celled organism with a hollow body surrounded by a collagen-rich fibrous network. It has been suggested that Aggregation Factor can be very specific, resulting in different types of cells from the same species of Sponge having reduced adhesiveness compared to the adhesiveness of homologous cells. The Aggregation Factor of *Geodia cydonium* has been found to be a proteinaceous compound composed of many different glycoproteins localized around a 90S sunburst-like core structure. The Aggregation Factor bridges two cells by ligating a cell-surface-bound Aggregation Receptor. The Aggregation Receptor contains scavenger receptor cysteine-rich (SRCR) domains, which consists of a fibronectin receptor binding site that interacts with cell surface integrins. SRCR is an ancient and highly conserved protein module.

REFERENCES

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RESEARCH USE

For research use only, not for use in diagnostic procedures.

SOURCE

SRCR (B4487M) is a mouse monoclonal antibody raised against recombinant SRCR (scavenger receptor cysteine-rich) domain of *Geodia cydonium* origin.

PRODUCT

Each vial contains 100 µg IgM in 1.0 ml TBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

SRCR (B4487M) is recommended for detection of Aggregation receptor (SRCR-SCR-Car) of *Geodia cydonium* 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)] and immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500).

Molecular Weight of SRCR: 550 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-mouse IgM-HRP: sc-2064 (dilution range: 1:500-1:5,000), TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein L PLUS-Agarose: sc-2336 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-mouse IgM-FITC: sc-2082 (dilution range: 1:100-1:400) or goat anti-mouse IgM-TR: sc-2983 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.