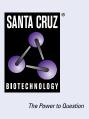
SANTA CRUZ BIOTECHNOLOGY, INC.

SCGN (F-9): sc-374355



BACKGROUND

SCGN, also known as Secretagogin, CALBL, setagin or SECRET, is a 276 amino acid cytoplasmic protein that contains six EF-hand domains and is related to the calicium-binding proteins Calretinin and Calbindin D28K. Expressed in a variety of tissues including stomach, thyroid, colon, brain and neuroendocrine cells, SCGN is thought to be involved in cell proliferation and KCI (potassium chloride)-mediated calcium flux events. Through its interaction with KCI and its subsequent ability to modulate calcium storage pools within the cell, SCGN may function to negatively control growth and differentiation rates and, thus, indirectly inhibit cell replication.

CHROMOSOMAL LOCATION

Genetic locus: SCGN (human) mapping to 6p22.2; Scgn (mouse) mapping to 13 A3.1.

SOURCE

SCGN (F-9) is a mouse monoclonal antibody raised against amino acids 186-276 mapping at the C-terminus of SCGN of human origin.

PRODUCT

Each vial contains 200 μ g lgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

SCGN (F-9) is available conjugated to agarose (sc-374355 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-374355 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-374355 PE), fluorescein (sc-374355 FITC), Alexa Fluor[®] 488 (sc-374355 AF488), Alexa Fluor[®] 546 (sc-374355 AF546), Alexa Fluor[®] 594 (sc-374355 AF594) or Alexa Fluor[®] 647 (sc-374355 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor[®] 680 (sc-374355 AF680) or Alexa Fluor[®] 790 (sc-374355 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

STORAGE

Store at 4° C, **D0 NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

APPLICATIONS

SCGN (F-9) is recommended for detection of SCGN of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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), immunohistochemistry (including paraffin-embedded sections) (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 SCGN siRNA (h): sc-95181, SCGN siRNA (m): sc-153255, SCGN shRNA Plasmid (h): sc-95181-SH, SCGN shRNA Plasmid (m): sc-153255-SH, SCGN shRNA (h) Lentiviral Particles: sc-95181-V and SCGN shRNA (m) Lentiviral Particles: sc-153255-V.

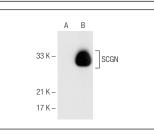
Molecular Weight of SCGN: 32 kDa.

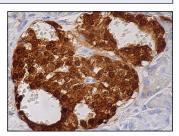
Positive Controls: SCGN (m): 293T Lysate: sc-123383.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz MarkerTM Molecular Weight Standards: sc-2035, UltraCruz[®] Blocking Reagent: sc-516214 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 m-IgG κ BP-FITC: sc-516140 or m-IgG κ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz[®] Mounting Medium: sc-24941 or UltraCruz[®] Hard-set Mounting Medium: sc-359850. 4) Immunohistochemistry: use m-IgG κ BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

DATA





SCGN (F-9): sc-374355. Western blot analysis of SCGN expression in non-transfected: sc-117752 (**A**) and mouse SCGN transfected: sc-123383 (**B**) 293T whole cell lysates.

SCGN (F-9): sc-374355. Immunoperoxidase staining of formalin fixed, paraffin-embedded human pancreas tissue showing cytoplasmic and nuclear staining of lslets of Langerhans.

SELECT PRODUCT CITATIONS

- Sifuentes-Dominguez, L.F., et al. 2019. SCGN deficiency results in colitis susceptibility. Elife 8: e49910.
- Dong, Y., et al. 2020. Secretagogin, a marker for neuroendocrine cells, is more sensitive and specific in large cell neuroendocrine carcinoma compared with the markers CD56, CgA, Syn and Napsin A. Oncol. Lett. 19: 2223-2230.
- 3. Wang, Q.W., et al. 2023. 16p11.2 CNV gene $Doc2\alpha$ functions in neurodevelopment and social behaviors through interaction with Secretagogin. Cell Rep. 42: 112691.

RESEARCH USE

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

PROTOCOLS

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

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