SANTA CRUZ BIOTECHNOLOGY, INC.

SCGN (m): 293T Lysate: sc-123383

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 KCl (potassium chloride)-mediated calcium flux events. Through its interaction with KCl 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.

REFERENCES

1. Wagner, L., Oliyarnyk, O., Gartner, W., Nowotny, P., Groeger, M., Kaserer, K., Waldhäusl, W. and Pasternack, M.S. 2000. Cloning and expression of secretagogin, a novel neuroendocrine- and pancreatic islet of Langerhans-specific Ca^{2+}-binding protein. J. Biol. Chem. 275: 24740-24751.
2. Gartner, W., Lang, W., Leutmetzer, F., Domanovits, H., Waldhäusl, W. and Wagner, L. 2001. Cerebral expression and serum detectability of secretagogin, a recently cloned EF-hand Ca^{2+}-binding protein. Cereb. Cortex 11: 1161-1169.
3. Birkenkamp-Demtröder, K., Wagner, L., Brandt Sørensen, F., Bording Astrup, L., Gartner, W., Scherübl, H., Heine, B., Christiansen, P. and Ørntoft, T.F. 2005. Secretagogin is a novel marker for neuroendocrine differentiation. Neuroendocrinology 82: 121-138.
4. Skovhus, K.V., Bergholdt, R., Erichsen, C., Sparre, T., Nerup, J., Karlsen, A.E. and Pociot, F. 2006. Identification and characterization of secretagogin promoter activity. Scand. J. Immunol. 64: 639-645.
5. Gartner, W., Vila, G., Daneva, T., Nabokikh, A., Koc-Saral, F., Ilhan, A., Majdic, O., Luger, A. and Wagner, L. 2007. New functional aspects of the neuroendocrine marker secretagogin based on the characterization of its rat homolog. Am. J. Physiol. Endocrinol. Metab. 293: E347-E354.
6. Pipp, I., Wagner, L., Rössler, K., Budka, H. and Preusser, M. 2007. Secretagogin expression in tumours of the human brain and its coverings. APMIS 115: 319-326.
7. Adolf, K., Wagner, L., Bergh, A., Stattin, P., Ottosen, P., Borre, M., Birkenkamp-Demtröder, K., Orntoft, T.F. and Tørring, N. 2007. Secretagogin is a new neuroendocrine marker in the human prostate. Prostate 67: 472-484.
8. Rogstam, A., Linse, S., Lindqvist, A., James, P., Wagner, L. and Berggard, T. 2007. Binding of calcium ions and SNAP 25 to the hexa EF-hand protein secretagogin. Biochem. J. 401: 353-363.

CHROMOSOMAL LOCATION

Genetic locus: Scgn (mouse) mapping to 13 A3.1.

PRODUCT

SCGN (m): 293T Lysate represents a lysate of mouse SCGN transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

APPLICATIONS

SCGN (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive SCGN antibodies. Recommended use: 10-20 µl per lane.

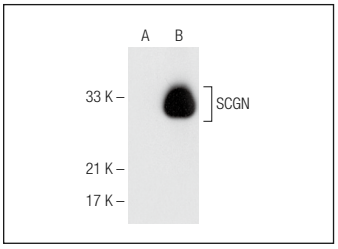
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

SCGN (F-9): sc-374355 is recommended as a positive control antibody for Western Blot analysis of enhanced mouse SCGN expression in SCGN transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

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.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. 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 for detailed protocols and support products.