

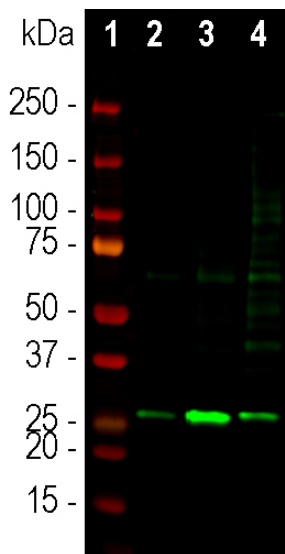
Ordering Information
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HGNC Name: SCGN
UniProt: O76038
RRID: AB_2572380
Immunogen: Full-length recombinant human secretagogin protein expressed in and purified from *E. coli*.
Format: Affinity purified antibody at 1mg/mL in 50% PBS, 50% glycerol plus 5mM Na₂S₂O₃
Storage: Store at 4°C for short term, for longer term at -20°C
Recommended dilutions:
 WB: 1:1,000-5,000 IF/ICC or IHC: 1:1,000-1:2,000

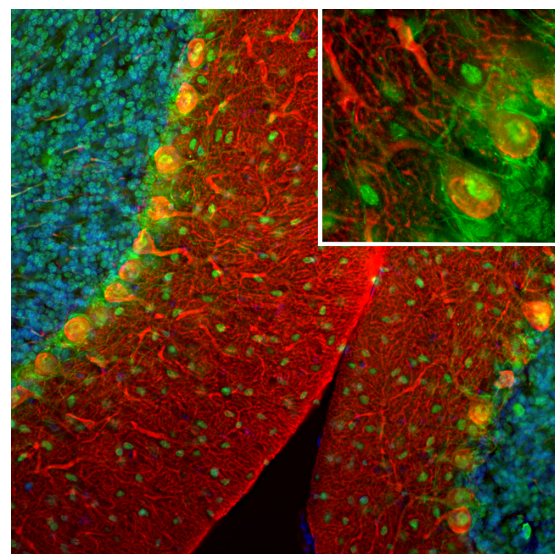
References:

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2. Gartner W, et al. Cerebral expression and serum detectability of secretagogin, a recently cloned EF-hand Ca²⁺-binding protein. *Cereb. Cortex* 11:1161-9 (2001).
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Applications	Host	Isotype	Molecular Wt.	Species Cross-Reactivity
WB, IF/ICC, IHC	Rabbit		~27kDa	Hu, Rt, Ms



Western blot analysis of different tissue lysates using rabbit pAb to secretagogin, RPCA-SCGN, dilution 1:1,000, in green: [1] protein standard (red), [2] rat pancreas, [3] rat olfactory bulb, and [4] mouse olfactory bulb lysates. Bands at ~27kDa correspond to secretagogin protein.



Immunofluorescent analysis of a rat brain cerebellum section stained with rabbit pAb to secretagogin, RPCA-SCGN, dilution 1:1,000, in green, and costained with mouse mAb to calbindin, MCA-4H7, dilution 1:1,000 in red. The blue is DAPI staining of nuclear DNA. Following transcardial perfusion with 4% paraformaldehyde, brain was post fixed for 24 hours, cut to 45µm, and free-floating sections were stained with the above antibodies. RPCA-SCGN antibody stains granule cells and interneurons while calbindin antibody reveals protein expressed in dendrites and perikarya of Purkinje cells in the molecular layer of the cerebellum.

Background:

Secretagogin is a member of the EF-hand superfamily of small Calcium-binding proteins which are widely expressed in cells and tissues. It was first cloned from pancreatic islets of Langerhans and neuroendocrine cells and is highly expressed in these tissues (1). Initially it is thought to be restricted to neuroendocrine cells, but it is now evident that secretagogin is expressed in numerous brain regions (2,3). The expression pattern of secretagogin is not well conserved from rodents to humans; While human brain reveals an expression maximum in the cerebellum, in rat and mouse brain the highest expression is found in the olfactory bulbs. In the cerebellum the protein is highly expressed in basket and stellate cells. Secretagogin has been shown to be involved in insulin secretion from pancreatic beta cells and is a strong candidate as a biomarker for endocrine tumors (4). Similar to S100β, secretagogin may be a useful biomarker of neuronal damage, stroke, and eventually psychiatric conditions (2,5-7). Moreover, secretagogin has been hypothesized to exert a neuroprotective role in neurodegenerative diseases like Alzheimer's disease (8).

The RPCA-SCGN antibody was made against the full length recombinant human secretagogin protein expressed in and purified from *E. coli*. RPCA-SCGN works well on mammalian cells grown in culture and in sections including formalin fixed and paraffin embedded material, see under "Additional Info" tag for details. We also supply a chicken polyclonal antibody to this protein, [CPCA-SCGN](#).

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Abbreviation Key:

mAb—Monoclonal Antibody **pAb**—Polyclonal Antibody **WB**—Western Blot **IF**—Immunofluorescence **ICC**—Immunocytochemistry
IHC—Immunohistochemistry **E**—ELISA **Hu**—Human **Mo**—Monkey **Do**—Dog **Rt**—Rat **Ms**—Mouse **Co**—Cow **Pi**—Pig **Ho**—Horse **Ch**—Chicken
Dr—*D. rerio* **Dm**—*D. melanogaster* **Sm**—*S. mutans* **Ce**—*C. elegans* **Sc**—*S. cerevisiae* **Sa**—*S. aureus* **Ec**—*E. coli*.