

## IVD DATA SHEET

### SCGN

Concentrated Rabbit Monoclonal Antibody

#### Intended Use:

For in Vitro Diagnostic Use

Epitomics' Rabbit Monoclonal Anti-Human SCGN, Clone EP237, is intended for use to qualitatively identify SCGN by light microscopy in sections of formalin-fixed, paraffin-embedded tissue using immunohistochemical detection methodology. Interpretation of any positive or negative staining must be complemented with the evaluation of proper controls and must be made within the context of the patient's clinical history and other diagnostic tests. Evaluation must be performed by a qualified pathologist.

Catalog number	Description	Dilution
AC-0224A	0.1 ml, concentrated	1:100-1:200
AC-0224B	0.5 ml, concentrated	1:100-1:200
AC-0224	1 ml, concentrated	1:100-1:200
AC-0224BULK	2 ml or more, concentrated	1:100-1:200

**Immunogen:** A synthetic peptide corresponding to residues of human SCGN protein

**Source:** Rabbit Monoclonal Antibody

**Clone ID:** EP237

**Isotype:** Rabbit IgG

**Application:** Immunohistochemistry for formalin-fixed paraffin-embedded tissue

#### Summary and Explanation:

Secretagogin (SCGN) is a novel calcium-binding protein which consists of six EF-hand domains. This protein was first identified as a pancreatic  $\beta$ -cell specific calcium-binding protein.

SCGN has been detected in neuroendocrine cells of the pancreas and GI tract. In the central nervous system, SCGN was detected in a neuron-specific expression pattern with high expression in basket and stellate cells of the cerebellar cortex, in secretory neurons of the anterior region of the pituitary gland and in singular neurons of the frontal and parietal neocortex. Remarkable staining intensity was observed in hypothalamic and in hippocampal neurons. Co-localization of SCGN with other neuroendocrine markers (chromogranin A, neuron-specific enolase and synaptophysin) has been observed in neuroendocrine cells of normal mucosa. SCGN can be used to detect small cell lung cancers. Compared to chromogranin A, SCGN is more sensitive in identification of a subset of neuroendocrine tumors, such as gastric neuroendocrine cancers and typical carcinoid tumors of rectum and ovary. SCGN is a useful marker for neuroendocrine differentiation.

#### Reagent Provided:

Antibody to SCGN is affinity purified and diluted in 10 mM Phosphate buffered saline (PBS), pH 7.2 containing 1% bovine serum albumin (BSA) and 0.09% sodium azide (NaN<sub>3</sub>).

#### Storage and Stability:

Store at 2-8 °C. Do not use after expiration date indicated on vial. End user must validate any storage conditions other than those specified.

#### Procedures Recommended:

- 1. Pretreatment:** Epitope retrieval using Tris/EDTA buffer (catalog #: SP-0004) with a pressure cooker.
- 2. Endogenous peroxidase block:** Block for 10 minutes at room temperature using peroxidase solution (catalog #: SP-0002).
- 3. Protein block:** Block for 10 minutes at room temperature using blocking solution (catalog #: SP-0003).
- 4. Primary antibody:** Incubate for 30 minutes.
- 5. Detection:** Follow instructions from the selected detection system (EpiPrecision™, a Biotin Streptavidin-HRP Detection, catalog #: DK-0001, 0003, or EpiVision™, a Rabbit Polymer Detection, catalog # DK-0002, 0004).

The antibody dilution and protocol may vary depending on the specimen preparation and specific application. Optimal conditions should be determined by the individual laboratory.

#### Performance Characteristics:

This antibody gives cytoplasmic staining in positive cells. The recommended positive controls are pancreas for normal tissue and small cell lung carcinoma for abnormal tissue.

#### Limitations:

Immunohistochemistry is a complex process. Variation in tissue selection, tissue processing, antigen retrieval, peroxidase activity, detection systems and improper counterstaining may cause variation in results.

#### References:

1. Gartner W, et al.: *Cereb Cortex* 2001, 11:1161-1169
2. Wagner L, et al.: *J Biol Chem* 2000, 275:24740-24751
3. Birkenkamp-Demtroder K, et al.: *Neuroendocrinology* 2005, 82:121-138
4. Lai M, et al.: *Virchows Arch* 2006, 449:402-409

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