

# **Rabbit Anti-Neurogranin antibody**

# SL11435R

| Product Name:          | Neurogranin   |
|------------------------|---|
| Chinese Name:          | 神经颗粒素抗体   |
| Alias:                 | Calmodulin binding protein; Hng; NEUG(55-78); NEUG_HUMAN; Neurogranin                     |
|                        | (protein kinase C substrate); Ng; NG; NRGN; Protein kinase C substrate; RC3; BICKS.       |
| Organism Species:      | Rabbit  |
| Clonality:             | Polyclonal  |
| React Species:         | Human, Mouse, Rat, Dog, Pig, Cow, Horse, Rabbit,  |
| Applications:          | WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-                     |
|                        | 500IF=1:100-500 (Paraffin sections need antigen repair)                                   |
|                        | not yet tested in other applications.   |
|                        | optimal dilutions/concentrations should be determined by the end user.                    |
| Molecular weight:      | 7.6kDa  |
| Cellular localization: | cytoplasmic   |
| Form:                  | Lyophilized or Liquid   |
| Concentration:         | 1mg/ml  |
| immunogen:             | KLH conjugated synthetic peptide derived from human NG/Neurogranin:30-78/78               |
| Lsotype:               | IgG   |
| Purification:          | affinity purified by Protein A  |
| Storage Buffer:        | 0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.                          |
| Storage:               | Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized          |
|                        | antibody is stable at room temperature for at least one month and for greater than a year |
|                        | when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of          |
|                        | antibody the antibody is stable for at least two weeks at 2-4 °C.                         |
| PubMed:                | <u>PubMed</u>   |
| Product Detail:        | Neurogranin (NRGN) is the human homolog of the neuron-specific rat RC3/neurogranin        |
|                        | gene. This gene encodes a postsynaptic protein kinase substrate that binds calmodulin in  |
|                        | the absence of calcium. The NRGN gene contains four exons and three introns. The          |
|                        | exons 1 and 2 encode the protein and exons 3 and 4 contain untranslated sequences. It is  |
|                        | suggested that the NRGN is a direct target for thyroid hormone in human brain, and that   |
|                        | control of expression of this gene could underlay many of the consequences of             |

hypothyroidism on mental states during development as well as in adult subjects. [provided by RefSeq, Jul 2008].

### **Function:**

Acts as a "third messenger" substrate of protein kinase C-mediated molecular cascades during synaptic development and remodeling. Binds to calmodulin in the absence of calcium.

# **Tissue Specificity:**

In the cerebral cortex, found in the cell bodies of neurons in layers II-VI, and in apical and basal dendrites of pyramidal neurons. Is not found in the dendrites in patients with Alzheimer disease.

### Post-translational modifications:

Phosphorylated at Ser-36 by PHK

### Similarity:

Belongs to the neurogranin family. Contains 1 collagen-like domain. Contains 1 IQ domain.

# SWISS:

Q92686

#### Gene ID:

4900

# Database links:

Entrez Gene: 616955 Cow

Entrez Gene: 4900 Human

Entrez Gene: 64011 Mouse

Entrez Gene: 64356 Rat

Omim: 602350 Human

SwissProt: P35722 Cow

SwissProt: Q92686 Human

SwissProt: P60761 Mouse

SwissProt: Q04940 Rat

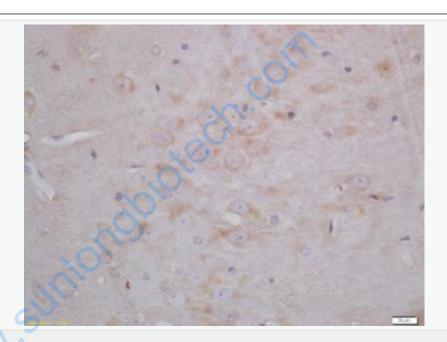
Unigene: 524116 Human

Unigene: 335065 Mouse

Unigene: 11236 Rat

## **Important Note:**

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.



### Picture:

Tissue/cell: rat brain tissue; 4% Paraformaldehyde-fixed and paraffin-embedded;
Antigen retrieval: citrate buffer ( 0.01M, pH 6.0 ), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer

Incubation: Anti-Neurogranin Polyclonal Antibody, Unconjugated(SL11435R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining

(normal goat serum, C-0005) at 37°C for 20 min;