

**Goat Anti-Neurogranin precursor Antibody**  
**Peptide-affinity purified goat antibody**  
**Catalog # AF2203a****Specification**

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**Goat Anti-Neurogranin precursor Antibody - Product Information**

Application	WB, IHC, E
Primary Accession	<a href="#">Q92686</a>
Other Accession	<a href="#">NP_006167</a> , <a href="#">4900</a> , <a href="#">647011 (mouse)</a>
Reactivity	Human, Mouse
Predicted	Dog
Host	Goat
Clonality	Polyclonal
Concentration	100ug/200ul
Isotype	IgG
Calculated MW	7618

**Goat Anti-Neurogranin precursor Antibody - Additional Information****Gene ID** 4900**Other Names**

Neurogranin, Ng, RC3, NEUG(55-78), NRGN

**Dilution**

WB~~1:1000

IHC~~1:100~500

E~~N/A

**Format**

0.5 mg IgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

Goat Anti-Neurogranin precursor Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

**Goat Anti-Neurogranin precursor Antibody - Protein Information****Name** NRGN**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 (By similarity).

#### Tissue Location

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.

#### Goat Anti-Neurogranin precursor Antibody - Protocols

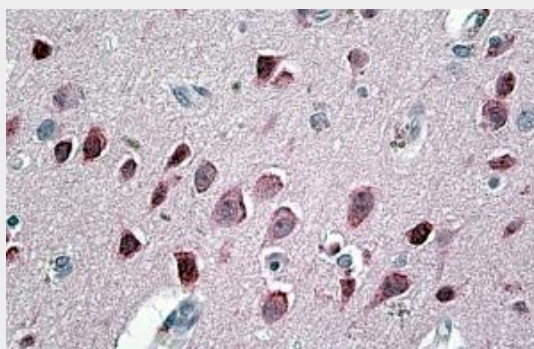
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

#### Goat Anti-Neurogranin precursor Antibody - Images



AF2203a (0.1  $\mu$ g/ml) staining of Mouse Brain lysate (35  $\mu$ g protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.



AF2203a (3.8  $\mu$ g/ml) staining of paraffin embedded Human Cortex. Steamed antigen retrieval

with citrate buffer pH 6, AP-staining.

### **Goat Anti-Neurogranin precursor Antibody - Background**

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.

### **Goat Anti-Neurogranin precursor Antibody - References**

Common variants conferring risk of schizophrenia. Stefansson H, et al. Nature, 2009 Aug 6. PMID 19571808.

Chromosomal microarray mapping suggests a role for BSX and Neurogranin in neurocognitive and behavioral defects in the 11q terminal deletion disorder (Jacobsen syndrome). Coldren CD, et al. Neurogenetics, 2009 Apr. PMID 18855024.

Pathways and genes differentially expressed in the motor cortex of patients with sporadic amyotrophic lateral sclerosis. Lederer CW, et al. BMC Genomics, 2007 Jan 23. PMID 17244347.

Association of the gene encoding neurogranin with schizophrenia in males. Ruano D, et al. J Psychiatr Res, 2008 Jan. PMID 17140601.

Involvement of the GC-rich sequence and specific proteins (Sp1/Sp3) in the basal transcription activity of neurogranin gene. Gui J, et al. Biochem Biophys Res Commun, 2006 Jun 23. PMID 16677608.