### For Research Use Only

# Neurogranin Polyclonal antibody

Catalog Number: 10440-1-AP

3 Publications



**Basic Information** 

Catalog Number: 10440-1-AP

Size: 1000 µg/ml Source:

Rabbit Isotype:

Immunogen Catalog Number:

AG0676

GenBank Accession Number: BC002835

GeneID (NCBI): 4900

**UNIPROT ID:** Q92686 Full Name:

neurogranin (protein kinase C substrate, RC3)

Calculated MW: 7.6 kDa

Observed MW: 15 kDa

**Purification Method:** Antigen affinity purification Recommended Dilutions:

WB 1:500-1:2000

IP 0.5-4.0 ug for 1.0-3.0 mg of total

protein lysate IHC 1:50-1:500

**Applications** 

**Tested Applications:** IHC, IP, WB, ELISA Cited Applications:

IF, IHC

Species Specificity: human, mouse, rat **Cited Species:** 

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0

Positive Controls:

WB: mouse brain tissue, IP: mouse brain tissue, IHC: mouse brain tissue,

## **Background Information**

Neurogranin (formerly designated p17, also known as Ng, RC3 and BICKS) belongs to the neurogranin family. It is a neuron-specific substrate for protein kinase C (PKC). It is a postsynaptic protein that is highly enriched in brain, with restricted expression in the cortex, striatum, hippocampus, thalamus, hypothalamus and olfactory bulb nuclei. Neurogranin binds calmodulin at low levels of calcium, thereby regulating calmodulin-dependent nitric oxide synthase. Neurogranin acts as a "third messenger" substrate of protein kinase C-mediated molecular cascades  $during\ synaptic\ development\ and\ remodeling.\ It\ binds\ to\ calmodulin\ in\ the\ absence\ of\ calcium. The\ observed$ molecular weight of human NRGN by Western blotting is about 15-17 kDa.

#### **Notable Publications**

Author	Pubmed ID	Journal	Application
Marina Di Domenico	34571959	Cells	IF
Kira Kleszka	33154420	Sci Rep	IHC
Ingrid Ehrmann	30674417	Elife	

Storage

Store at -20°C. Stable for one year after shipment.

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

For technical support and original validation data for this product please contact:

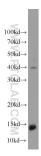
T: 4006900926 E: Proteintech-CN@ptglab.com

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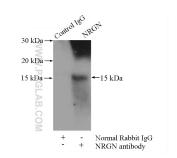
## **Selected Validation Data**



Immunohistochemical analysis of paraffinembedded mouse brain tissue slide using 10440-1-AP (Neurogranin antibody) at dilution of 1:200 (under 0x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



mouse brain tissue were subjected to SDS PAGE followed by western blot with 10440-1-AP (Neurogranin antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours.



IP result of anti-Neurogranin (IP:10440-1-AP, 4ug; Detection:10440-1-AP 1:1000) with mouse brain tissue lysate 2640ug.