

For Research Use Only

# Neurogranin Recombinant antibody, PBS Only

Catalog Number: 83593-5-PBS



## Basic Information

<b>Catalog Number:</b> 83593-5-PBS	<b>GenBank Accession Number:</b> BC002835	<b>Purification Method:</b> Protein A purification
<b>Size:</b> 100ug , Concentration: 1 mg/ml by Nanodrop;	<b>GeneID (NCBI):</b> 4900	<b>CloneNo.:</b> 240526B9
<b>Source:</b> Rabbit	<b>UNIPROT ID:</b> Q92686	
<b>Isotype:</b> IgG	<b>Full Name:</b> neurogranin (protein kinase C substrate, RC3)	
<b>Immunogen Catalog Number:</b> AG0676	<b>Calculated MW:</b> 7.6 kDa	
	<b>Observed MW:</b> 15-17 kDa	

## Applications

**Tested Applications:**  
WB, IHC, FC (Intra), ELISA

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

## 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.

## Storage

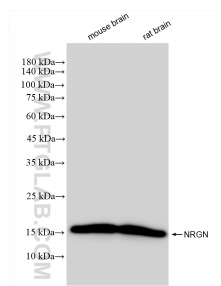
**Storage:**  
Store at -80°C.

**Storage Buffer:**  
PBS Only

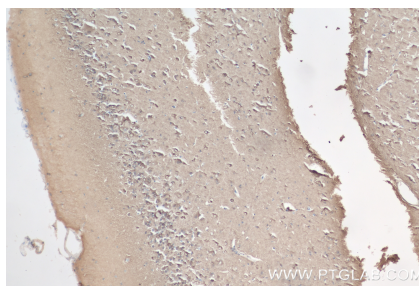
For technical support and original validation data for this product please contact:  
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)  
E: [proteintech@ptglab.com](mailto:proteintech@ptglab.com)  
W: [ptglab.com](http://ptglab.com)

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

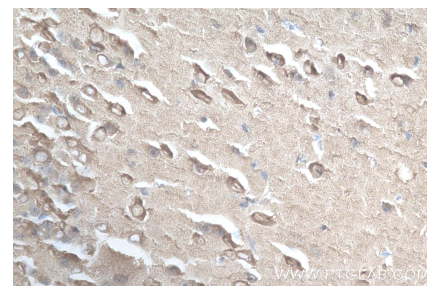
## Selected Validation Data



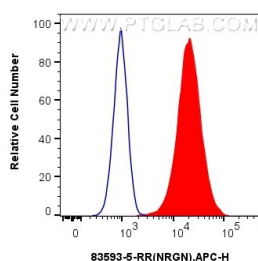
Various lysates were subjected to SDS PAGE followed by western blot with 83593-5-RR (Neurogranin antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 83593-5-PBS in a different storage buffer formulation.



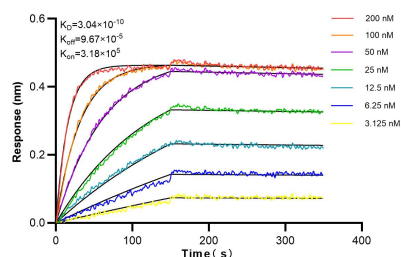
Immunohistochemical analysis of paraffin-embedded mouse brain tissue slide using 83593-5-RR (Neurogranin antibody) at dilution of 1:500 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 83593-5-PBS in a different storage buffer formulation.



Immunohistochemical analysis of paraffin-embedded mouse brain tissue slide using 83593-5-RR (Neurogranin antibody) at dilution of 1:500 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 83593-5-PBS in a different storage buffer formulation.



$1 \times 10^6$  A549 cells were intracellularly stained with 0.25  $\mu$ g Neurogranin Recombinant antibody (83593-5-RR, Clone:240526B9) and APC-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) (red), or 0.25  $\mu$ g Isotype Control (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C). This data was developed using the same antibody clone with 83593-5-PBS in a different storage buffer formulation.



Biolayer interferometry (BLI) kinetic assays of 83593-5-RR against Human NRGN were performed. The affinity constant is 0.304 nM.