

For Research Use Only

Neurogranin Polyclonal antibody

Catalog Number: 10440-1-AP

3 Publications



Basic Information

Catalog Number:

10440-1-AP

Size:

150ul, Concentration: 1000 µg/ml by Nanodrop and 527 µg/ml by Bradford method using BSA as the standard;

Source:

Rabbit

Isotype:

IgG

Immunogen Catalog Number:

AG0676

GenBank Accession Number:

BC002835

GeneID (NCBI):

4900

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 µg for IP and 1:500-1:2000 for WB

IHC 1:50-1:500

Applications

Tested Applications:

IHC, IP, WB, ELISA

Cited Applications:

IF, IHC

Species Specificity:

human, mouse, rat

Cited Species:

mouse

Positive Controls:

WB: mouse brain tissue,

IP: mouse brain tissue,

IHC: mouse brain tissue,

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

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

Storage:

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

Storage Buffer:

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

Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

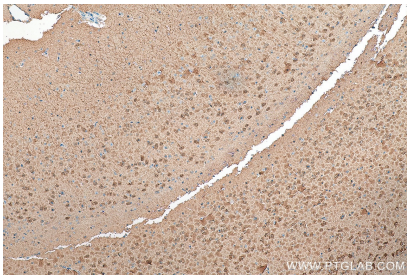
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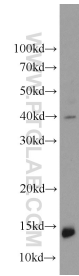
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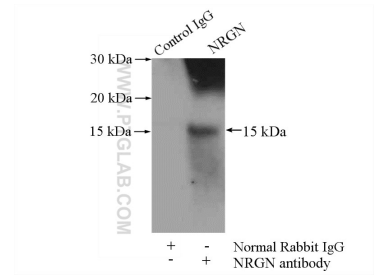
Selected Validation Data



Immunohistochemical analysis of paraffin-embedded 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.