For Research Use Only

Neurogranin Recombinant antibody

Catalog Number:83593-5-RR



Basic Information

Catalog Number: 83593-5-RR

Size: 1000 µg/ml Source: Rabbit Isotype:

Immunogen Catalog Number:

AG0676

Tested Applications: WB, FC (Intra), ELISA

Species Specificity: human, mouse, rat

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: 15-17 kDa

Purification Method: Protein A purfication

CloneNo.: 240526B9

Recommended Dilutions: WB 1:2000-1:10000

Positive Controls:

WB: mouse brain tissue, rat brain tissue

Background Information

Neurogranin (formerly designated p17, also known as Ng, RC3 and BICKS) belongs to the neurogranin family. It is a $neuron-specific \, substrate \, for \, protein \, kinase \, C \, (PKC). \, It \, is \, a \, postsynaptic \, protein \, that \, is \, highly \, enriched \, in \, brain, \, with \, it is \, a \, postsynaptic \, protein \, that \, is \, highly \, enriched \, in \, brain, \, with \, it is \, a \, postsynaptic \, protein \, that \, is \, highly \, enriched \, in \, brain, \, with \, it is \, a \, postsynaptic \, protein \, that \, is \, highly \, enriched \, in \, brain, \, with \, it is \, a \, postsynaptic \, protein \, that \, is \, highly \, enriched \, in \, brain, \, with \, it is \, a \, postsynaptic \, protein \, that \, is \, highly \, enriched \, in \, brain, \, with \, it is \, a \, postsynaptic \, protein \, that \, is \, highly \, enriched \, in \, brain, \, with \, it is \, a \, postsynaptic \, protein \, that \, is \, highly \, enriched \, in \, brain, \, with \, it is \, a \, postsynaptic \, protein \, that \, is \, highly \, enriched \, in \, brain, \, with \, it is \, a \, postsynaptic \, protein \, that \, it is \, a \, postsyna$ 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

Applications

Storage:

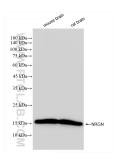
Store at -20°C. Stable for one year after shipment.

Storage Buffer:

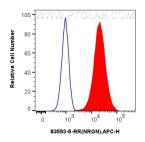
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

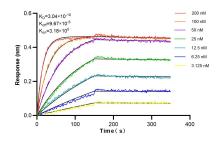
Selected Validation Data



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.



1x10^6 A549 cells were intracellularly stained with 0.25 ug Neurogranin Recombinant antibody (83593-5-RR, Clone:240526B9) and APC-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) (red), or 0.25 ug Isotype Control (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).



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