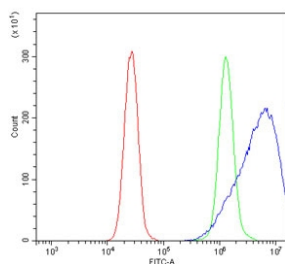


NRGN Antibody / Neurogranin (RQ6501)

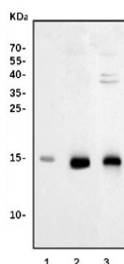
Catalog No.	Formulation	Size
RQ6501	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human, Mouse, Rat
Format	Antigen affinity purified
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Affinity purified
Buffer	Lyophilized from 1X PBS with 2% Trehalose
UniProt	Q92686
Applications	Western Blot : 1-2ug/ml Flow Cytometry : 1-3ug/million cells Direct ELISA : 0.1-0.5ug/ml
Limitations	This NRGN antibody is available for research use only.



Flow cytometry testing of human K562 cells with NRGN antibody at 1ug/million cells (blocked with goat sera); Red=cells alone, Green=isotype control, Blue= NRGN antibody.



Western blot testing of 1) human PC-3, 2) rat brain and 3) mouse brain lysate with NRGN antibody. Predicted molecular weight: ~8 kDa but routinely observed at ~17 kDa.

Description

Neurogranin is a calmodulin-binding protein expressed primarily in the brain, particularly in dendritic spines, and participating in the protein kinase C signaling pathway. 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.

Application Notes

Optimal dilution of the NRGN antibody should be determined by the researcher.

Immunogen

An E. coli-derived human protein (amino acids K11-K54) was used as the immunogen for the NRGN antibody.

Storage

After reconstitution, the NRGN antibody can be stored for up to one month at 4°C. For long-term, aliquot and store at -20°C. Avoid repeated freezing and thawing.