

Neuronatin Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP54531

Product Information

Application IHC-P, IHC-F, IF, ICC

Primary Accession Q16517

Reactivity Rat, Pig, Bovine

Host Rabbit
Clonality Polyclonal
Calculated MW 9237
Physical State Liquid

Immunogen KLH conjugated synthetic peptide derived from human Neuronatin

Epitope Specificity 31-81/81 **Isotype** IgG

Purity affinity purified by Protein A

Buffer 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.

SIMILARITY Belongs to the neuronatin family.

Important Note This product as supplied is intended for research use only, not for use in

human, therapeutic or diagnostic applications.

Background Descriptions The paternally imprinted Neuronatin gene (NNAT) is initially expressed in

rhombomeres and the pituitary gland and is later expressed more widely, but much less abundantly, in the central and peripheral nervous systems. The human NNAT gene maps to chromosome 20q11.23 and contains an imprinting region associated with morphological abnormalities and early neonatal lethality. Specifically, hypermethylation of the NNAT gene occurs in both myeloid and lymphoid acute pediatric leukemias and may inhibit NNAT expression. The Neuronatin protein consists of two isoforms, alpha and beta,

which are the products of alternative splicing. The alpha form of the

Neuronatin gene is encoded by three exons, whereas the beta form is missing

the second exon. Neuronatin mRNA expression is abundant in

undifferentiated PC-12 cells. Treatment of these cells with nerve growth factor

(NGF), which contributes to neuronal differentiation, downregulates

Neuronatin mRNA expression. NNAT (-) 1.9 PC-12 cells exhibit an increase in nigericin, rotenone and valinomcin sensitivity; NNAT transfection restores wild-type PC-12 resistance. These results suggests a potential protective role

for Neuronatin against toxic insult during development.

Additional Information

Gene ID 4826

Other Names Neuronatin, NNAT

Dilution IHC-P=1:100-500,IHC-F=1:100-500,ICC=1:100-500,IF=1:100-500

Format 0.01M TBS(pH7.4) with 1% BSA, 0.09% (W/V) sodium azide and 50% Glyce

Storage Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When

reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody

is stable for at least two weeks at 2-4 °C.

Protein Information

Name NNAT

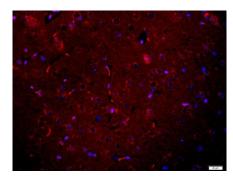
Function May participate in the maintenance of segment identity in the hindbrain and

pituitary development, and maturation or maintenance of the overall

structure of the nervous system. May function as a regulatory subunit of ion

channels.

Images



Paraformaldehyde-fixed, paraffin embedded (Rat brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (Neuronatin) Polyclonal Antibody, Unconjugated (AP54531) at 1:400 overnight at 4°C, followed by a conjugated secondary antibody (bs-0295G-cy3) for 90 minutes, and DAPI for nuclei staining.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.