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Neuronatin Rabbit pAb

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Catalog # AP54531

Product Information

Application	IHC-P, IHC-F, IF
Primary Accession	Q16517
Reactivity	Rat
Predicted	Human, Mouse, Pig, Rabbit
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,IF=1:100-500

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.

Background

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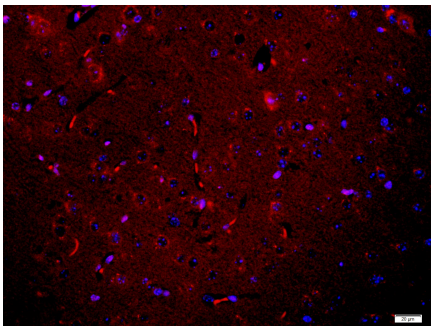
Images



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 (AP54531-cy3) for 90 minutes, and DAPI for nuclei staining.