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Neurogenin1 (NeuroG1) Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP2022a

Product Information

Application	WB, E
Primary Accession	Q92886
Other Accession	NP_006152
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB02905
Calculated MW	25718
Antigen Region	31-60

Additional Information

Gene ID	4762
Other Names	Neurogenin-1, NGN-1, Class A basic helix-loop-helix protein 6, bHLHa6, Neurogenic basic-helix-loop-helix protein, Neurogenic differentiation factor 3, NeuroD3, NEUROG1, BHLHA6, NEUROD3, NGN, NGN1
Target/Specificity	This Neurogenin1 (NeuroG1) antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 31-60 amino acids from the N-terminal region of human Neurogenin1 (NeuroG1).
Dilution	WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	Neurogenin1 (NeuroG1) Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	NEUROG1
Synonyms	BHLHA6, NEUROD3, NGN, NGN1

Function	Acts as a transcriptional regulator. Involved in the initiation of neuronal differentiation. Activates transcription by binding to the E box (5'-CANNTG-3'). Associates with chromatin to enhancer regulatory elements in genes encoding key transcriptional regulators of neurogenesis (By similarity).
Cellular Location	Nucleus.
Tissue Location	Expression restricted to the embryonic nervous system

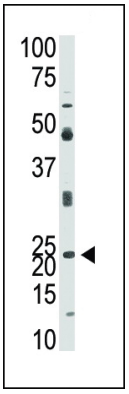
Background

Basic helix-loop-helix (bHLH) proteins are transcription factors involved in determining cell type during development. NeuroG1 is a bHLH protein with dual cell-fate specification roles. It functions during neurogenesis, and it has also been shown to inhibit the differentiation of neural stem cells into astrocytes. NeuroG1 promotes neurogenesis by functioning as a transcriptional activator, yet it inhibits astrocyte differentiation by compartmentalizing the CREB-binding protein transcription complex away from astrocyte differentiation genes and by inhibiting STAT transcription factors essential for gliogenesis.

References

Tamimi, R.M., et al., Genomics 40(2):355-357 (1997).
McCormick, M.B., et al., Mol. Cell. Biol. 16(10):5792-5800 (1996).

Images



The anti-NeuroG1 N-term Pab (Cat. #AP2022b) is used in Western blot to detect NeuroG1 in A375 cell lysate.