

NEUROD2 Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP51386

Product Information

Application WB, IP, IHC-P Primary Accession Q15784

Reactivity Human, Mouse, Rat

HostRabbitClonalityPolyclonalCalculated MW41361

Additional Information

Gene ID 4761

Other Names Neurogenic differentiation factor 2, NeuroD2, Class A basic helix-loop-helix

protein 1, bHLHa1, NeuroD-related factor, NDRF, NEUROD2, BHLHA1, NDRF

Dilution WB~~1:1000 IP~~N/A IHC-P~~N/A

Format 0.01M PBS, pH 7.2, 0.09% (W/V) Sodium azide, Glycerol 50%

Storage Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

Name NEUROD2

Synonyms BHLHA1, NDRF

Function Transcriptional regulator implicated in neuronal determination. Mediates

calcium-dependent transcription activation by binding to E box-containing promoter. Critical factor essential for the repression of the genetic program for neuronal differentiation; prevents the formation of synaptic vesicle clustering at active zone to the presynaptic membrane in postmitotic neurons. Induces transcription of ZEB1, which in turn represses neuronal differentiation by down-regulating REST expression. Plays a role in the establishment and maturation of thalamocortical connections; involved in the segregation of thalamic afferents into distinct barrel domains within layer VI of the somatosensory cortex. Involved in the development of the cerebellar and hippocampal granular neurons, neurons in the basolateral nucleus of amygdala and the hypothalamic-pituitary axis. Associates with chromatin to

the DPYSL3 E box-containing promoter (By similarity).

Cellular Location Nucleus {ECO:0000255 | PROSITE-ProRule:PRU00981}.

Background

Transcriptional regulator implicated in neuronal determination. Mediates calcium-dependent transcription activation by binding to E box-containing promoter. Critical factor essential for the repression of the genetic program for neuronal differentiation; prevents the formation of synaptic vesicle clustering at active zone to the presynaptic membrane in postmitotic neurons. Induces transcription of ZEB1, which in turn represses neuronal differentiation by down-regulating REST expression. Plays a role in the establishment and maturation of thalamocortical connections; involved in the segregation of thalamic afferents into distinct barrel domains within layer VI of the somatosensory cortex. Involved in the development of the cerebellar and hippocampal granular neurons, neurons in the basolateral nucleus of amygdala and the hypothalamic-pituitary axis. Associates with chromatin to the DPYSL3 E box-containing promoter (By similarity).

References

McCormick M.B., et al. Mol. Cell. Biol. 16:5792-5800(1996). Tapscott S.J., et al. Submitted (JUL-1998) to the EMBL/GenBank/DDBJ databases. Kitamura T., et al. Biochim. Biophys. Acta 1445:142-147(1999).

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