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Anti-NEUROD2 Antibody

Catalog # AP51386

Product Information

Application	WB, IHC
Primary Accession	Q15784
Reactivity	Human, Mouse, Rat, Bovine, Dog, Mk
Host	Rabbit
Clonality	Polyclonal
Calculated MW	41361

Additional Information

Gene ID	4761
Other Names	BHLHA1; NDRF; Neurogenic differentiation factor 2; NeuroD2; Class A basic helix-loop-helix protein 1; bHLHa1; NeuroD-related factor; NDRF
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the center region of human NEUROD2. The exact sequence is proprietary.
Dilution	WB~~WB (1/500 - 1/1000) IHC~~1:100~500
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

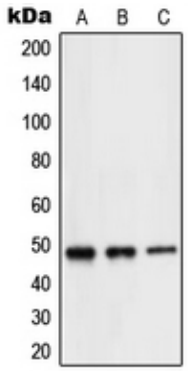
Name	NEUROD2
Synonyms	BHLHA1, NDRF
Function	Transcriptional regulator implicated in neuronal determination. Mediates calcium-dependent transcription activation by binding to E box-containing promoter. Critical factor essential for the repression of the genetic program for neuronal differentiation; prevents 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}.

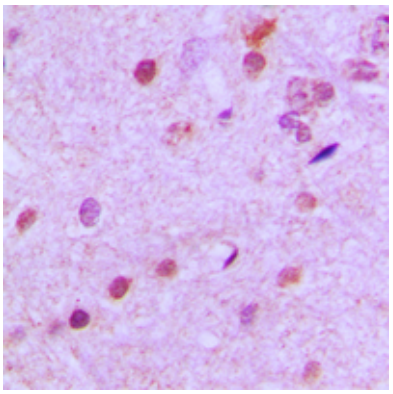
References

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).

Images



Western blot analysis of NEUROD2 expression in Jurkat (A), mouse brain (B), rat brain (C) whole cell lysates. (Predicted band size: 41 kD; Observed band size: 48 kD)



Immunohistochemical analysis of NEUROD2 staining in human brain formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

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