

Rabbit Neuro D Polyclonal Antibody | anti-NEUROD1 antibody

Neuro D Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA320762	Rabbit	Human, Mouse, Rat	ELISA, Immunocytochemistry, Immunofluorescence, Western Blot

PRODUCT SYNONYMS

Neuro D; Polyclonal Antibody; Neuro D Antibody; atonal; basic helix loop helix transcription factor; BETA 2; Beta cell E box transactivator 2; BETA2; BHF 1; BHF1; bHLHa3; class A basic helix loop helix protein 3; Class A basic helix-loop-helix protein 3; MODY 6; MODY6; NDF1_HUMAN; NeuroD; NeuroD1; Neurogenic differentiation 1; Neurogenic differentiation factor 1; neurogenic helix loop helix protein NEUROD; Neuronal differentiation 1; anti-NEUROD1 antibody

PRODUCT SPECIFICATIONS

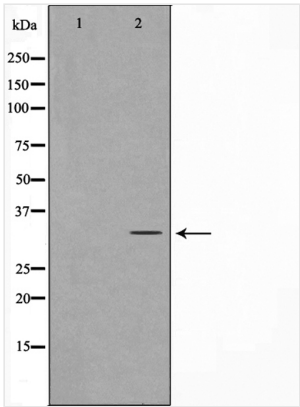
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	IgG
Specificity	Neuro D antibody detects endogenous levels of total Neuro D
Purity/Purification	The antiserum was purified by peptide affinity chromatography using SulfoLink Coupling Resin.
Form/Format	Liquid Phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Concentration	1mg/ml (varies by lot)
Sequence Length	356
Applicable Applications for anti-NEUROD1 antibody	ELISA, ICC (Immunocytochemistry), IF (Immunofluorescence), WB (Western Blot)
Immunogen	A synthesized peptide derived from human Neuro D
Subcellular Location	Cytoplasm. Nucleus.
Conjugation	Unconjugated
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.

IMAGES



IF (Immunofluorescence)

AAA320762 staining HeLa cells by IF/ICC. The sample were fixed with PFA and permeabilized in 0.1% Triton X-100, then blocked in 10% serum for 45 minutes at 25 degree C. The primary antibody was diluted at 1/200 and incubated with the sample for 1 hour at 37 degree C. An Alexa Fluor 594 conjugated goat anti-rabbit IgG (H+L) antibody, diluted at 1/600, was used as secondary antibody.



WB (Western Blot)

Western blot analysis on HeLa cell lysate using Neuro D Antibody. The lane on the left is treated with the antigen-specific peptide.

ADDITIONAL INFORMATION

Related Product Information for anti-NEUROD1 antibody

Description: NEUROD1 Differentiation factor required for dendrite morphogenesis and maintenance in the cerebellar cortex. Transcriptional activator. Binds to the insulin gene E-box. Efficient DNA binding requires dimerization with another bHLH protein. Heterodimer with TCF3/E47. Interacts with RREB1.

Function: Acts as a transcriptional activator: mediates transcriptional activation by binding to E box-containing promoter consensus core sequences 5'-CANNTG-3'. Associates with the p300/CBP transcription coactivator complex to stimulate transcription of the secretin gene as well as the gene encoding the cyclin-dependent kinase inhibitor CDKN1A. Contributes to the regulation of several cell differentiation pathways, like those that promote the formation of early retinal ganglion cells, inner ear sensory neurons, granule cells forming either the cerebellum or the dentate gyrus cell layer of the hippocampus, endocrine islet cells of the pancreas and enteroendocrine cells of the small intestine. Together with PAX6 or SIX3, is required for the regulation of amacrine cell fate specification. Also required for dendrite morphogenesis and maintenance in the cerebellar cortex. Associates with chromatin to enhance regulatory elements in genes encoding key transcriptional regulators of neurogenesis (By similarity).

Subunit Structure: Interacts (via helix-loop-helix motif domain) with EP300 (via C-terminus) (By similarity). Heterodimer with TCF3/E47; the heterodimer is inhibited in presence of ID2, but not NR0B2, to E-box element. Efficient DNA-binding requires dimerization with another bHLH protein. Interacts with RREB1. Interacts with EP300; the interaction is inhibited by NR0B2. Interacts with TCF3; the interaction is inhibited by ID2. Interacts with ATOH8 (By similarity).

Post-translational Modifications: Phosphorylated. In islet cells, phosphorylated on Ser-274 upon glucose stimulation; which may be required for nuclear localization. In activated neurons, phosphorylated on Ser-335; which promotes dendritic growth. Phosphorylated by MAPK1; phosphorylation regulates heterodimerization and DNA-binding activities. Phosphorylation on Ser-266 and Ser-274 increases transactivation on the insulin promoter in glucose-stimulated insulinoma cells (By similarity).

NCBI AND UNIPROT INFORMATION

NCBI GI #	121114306
NCBI GeneID	4760
NCBI Accession #	NP_002491.2
NCBI GenBank Nucleotide #	NM_002500.4
UniProt Accession #	Q13562; O00343; Q13340; Q5U095; Q96TH0; Q99455; Q9UEC8; B2R9I8; F1T0E1
Molecular Weight	Observed: 36 kDa Predicted: 40 kDa
NCBI Official Full Name	neurogenic differentiation factor 1
NCBI Official Synonym Full Names	neuronal differentiation 1

NCBI Official Symbol	NEUROD1
NCBI Official Synonym Symbols	BETA2; BHF-1; MODY6; NEUROD; bHLHa3
NCBI Protein Information	neurogenic differentiation factor 1
UniProt Protein Name	Neurogenic differentiation factor 1
UniProt Gene Name	NEUROD1
UniProt Synonym Gene Names	BHLHA3; NEUROD; NeuroD; NeuroD1; bHLHa3

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

AAA Biotech | Tel: +1 (619) 604-9440 | Fax: +1 (619) 604-9441 | contact@aaabiotech.com
Online datasheet: <https://stage.aaabiotech.com/polyclonal/neuro-d-antibody-immunocytochemistry-immunofluorescence-western-blot-elisa/320762>