Anti-Neuro D antibody

Description	Rabbit polyclonal to Neuro D.

Model	STJ94426
Host	Rabbit
Reactivity	Human, Mouse, Rat
Applications	ELISA, WB
Immunogen	Synthesized peptide derived from human Neuro D around the non-phosphorylation site of S274.
Immunogen Region	210-290 aa
Gene ID	4760
Gene Symbol	NEUROD1
Dilution range	WB 1:500-1:2000ELISA 1:5000
Specificity	Neuro D Polyclonal Antibody detects endogenous levels of Neuro D protein.
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Note	For Research Use Only (RUO).
Protein Name	Neurogenic differentiation factor 1 NeuroD NeuroD1 Class A basic helix-loop-helix protein 3 bHLHa3
Molecular Weight	36 kDa
Clonality	Polyclonal
Conjugation	Unconjugated

Isotype	IgG
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Concentration	1 mg/ml
Storage Instruction	Store at -20°C, and avoid repeat freeze-thaw cycles.
Database Links	HGNC:7762OMIM:125853
Alternative Names	Neurogenic differentiation factor 1 NeuroD NeuroD1 Class A basic helix-loop-helix protein 3 bHLHa3
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 enhancer regulatory elements in genes encoding key transcriptional regulators of neurogenesis .
Cellular Localization	Cytoplasm Nucleus. In pancreatic islet cells, shuttles to the nucleus in response to glucose stimulation . Colocalizes with NR0B2 in the nucleus.
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 .