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Datasheet for 600-101-MN7S

NEUROD1 Antibody

Overview

Description:	Anti-NEUROD1 (GOAT) Antibody - 600-101-MN7S
Item No.:	600-101-MN7S
Size:	25 µL
Applications:	WB
Reactivity:	Human
Host Species:	Goat

Product Details

Background:	NEUROD1 (Neuronal Differentiation 1) gene encodes a member of the NeuroD family of basic helix-loop-helix (bHLH) transcription factors. It acts as a transcriptional activator: mediates transcriptional activation by binding to E box-containing promoter consensus core sequences 5'-CANNTG-3'. NEUROD1 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, it is required for the regulation of amacrine cell fate specification. It is also required for dendrite morphogenesis and maintenance in the cerebellar cortex. NEUROD1 associates with chromatin to enhancer regulatory elements in genes encoding key transcriptional regulators of neurogenesis. Anti-NEUROD1 is useful for researchers interested in Maturity-onset diabetes of the young Type 6, Diabetes mellitus noninsulin-dependent, as well as, developmental biology, DNA-binding transcription factor activity, and protein heterodimerization activity.
Synonyms:	Goat Anti-Neuronal Differentiation 1 Antibody, Neurogenic Helix-Loop-Helix Protein NEUROD, Class A Basic Helix-Loop-Helix Protein 3, Neurogenic Differentiation Factor 1, Beta-Cell E-Box Transactivator 2, NEUROD, BHLHa3, Basic Helix-Loop-Helix Transcription Factor, Neurogenic Differentiation 1, NeuroD1, BHLHA3, NeuroD, BETA2, BHF-1, MODY6
Host Species:	Goat
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	NEUROD1
Reactivity:	Human
Immunogen Type:	Conjugated Peptide
Immunogen:	Anti-NEUROD1 Antibody was prepared from whole goat serum produced by repeated immunizations with a synthetic peptide corresponding to a N-terminal region of human Neurogenic differentiation factor 1 conjugated to Keyhole Limpet Hemocyanin (KLH).
Purity/Specificity:	This affinity purified antibody is directed against human NEUROD1. This product was affinity purified from monospecific antiserum by immunoaffinity purification. A BLAST analysis was used to suggest cross-reactivity with the antigen based on 100% homology with the immunizing sequence to mouse, rat, and golden hamster.
Relevant Links:	• NCBI - NP_002491.2 • GeneID - 4760 • UniProtKB - Q13562

Application Details

Tested Applications:	WB
Application Note:	Anti-NEUROD1 Antibody has been tested in Western Blot. Expect a band at ~39.9 kDa in western blot using appropriate lysates or tissues. Positive control used rec. NEUROD1 protein or SCLC-21H whole cell lysates in WB.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:10,000 - 1:50,000
WB:	5 µg/ml

Formulation

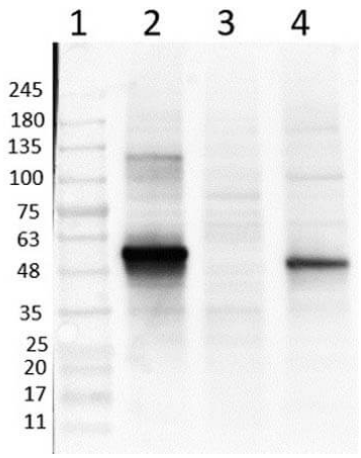
Physical State:	Liquid (sterile filtered)
Concentration:	1.0 mg/ml by UV absorbance at 280 nm
Buffer:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Preservative:	0.01% (w/v) Sodium Azide

Stabilizer:	None

Shipping & Handling

Shipping Condition:	Dry Ice
Storage Condition:	Store vial at -20° C or below prior to opening. This vial contains a relatively low volume of reagent (25 µL). To minimize loss of volume dilute 1:10 by adding 225 µL of the buffer stated above directly to the vial. Recap, mix thoroughly and briefly centrifuge to collect the volume at the bottom of the vial. Use this intermediate dilution when calculating final dilutions as recommended below. Store the vial at -20°C or below after dilution. Avoid cycles of freezing and thawing.
Expiration:	Expiration date is one (1) year from date of receipt.

Images



Western Blot
Western Blot of Goat Anti-NEUROD1 Antibody. Lane 1: Opal PreStained Molecular Weight Marker (p/n MB-210-0500). Lane 2: HEK293 whole cell lysate spiked with NEUROD1 recombinant protein (35µg/50ng) [+]. Lane 3: HEK293 whole cell lysate (p/n W09-000-365) (35µg) [-]. Lane 4: SCLC-21H whole cell lysate (35µg) [+]. Primary Antibody: Anti-NEUROD1 at 5µg/mL overnight at 2-8°. Secondary Antibody: Donkey Anti-Goat IgG HRP (p/n 605-703-125) at 1:40,000 for 30 min at RT. Blocking: BlockOut Buffer (p/n MB-073). Expected endogenous MW: ~39.9kDa. Expected recombinant MW: ~50-55kDa. Observed MW: ~50kDa.

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