

## Datasheet for 600-101-MN7S

# NEUROD1 Antibody

### Overview

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

### Product Details

<b>Background:</b>	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.
<b>Synonyms:</b>	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
<b>Host Species:</b>	Goat
<b>Clonality:</b>	Polyclonal
<b>Format:</b>	IgG

## Target Details

<b>Gene Name:</b>	NEUROD1
<b>Reactivity:</b>	Human
<b>Immunogen Type:</b>	Conjugated Peptide
<b>Immunogen:</b>	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).
<b>Purity/Specificity:</b>	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.
<b>Relevant Links:</b>	<ul style="list-style-type: none"><li>• <a href="#">NCBI - NP_002491.2</a></li><li>• <a href="#">GeneID - 4760</a></li><li>• <a href="#">UniProtKB - Q13562</a></li></ul>

## Application Details

<b>Tested Applications:</b>	WB
<b>Application Note:</b>	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.
<b>Assay Dilutions:</b>	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
<b>ELISA:</b>	1:10,000 - 1:50,000
<b>WB:</b>	5 µg/ml

## Formulation

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

**Stabilizer:** None

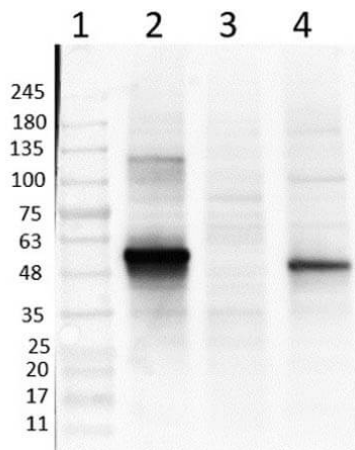
## Shipping & Handling

**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.

## Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.