

For Research Use Only

# NEUROD1 Monoclonal antibody, PBS Only



Catalog Number: 66691-1-PBS

## Basic Information

<b>Catalog Number:</b> 66691-1-PBS	<b>GenBank Accession Number:</b> BC009046	<b>Purification Method:</b> Protein A purification
<b>Size:</b> 1mg/ml	<b>GeneID (NCBI):</b> 4760	<b>CloneNo.:</b> 3E10F1
<b>Source:</b> Mouse	<b>UNIPROT ID:</b> Q13562	
<b>Isotype:</b> IgG1	<b>Full Name:</b> neurogenic differentiation 1	
<b>Immunogen Catalog Number:</b> AG27606	<b>Calculated MW:</b> 356 aa, 40 kDa	
	<b>Observed MW:</b> 40-50 kDa	

## Applications

**Tested Applications:**  
WB, IHC, ELISA

**Species Specificity:**  
Human, mouse

## Background Information

NeuroD is a member of the basic helix-loop-helix (bHLH) family of transcription factors. The basic helix-loop-helix (bHLH) proteins are transcription factors that are required for several aspects of development, including cell type determination, terminal differentiation and sex determination. Members of the myogenic determination family, MyoD, myf5, myogenin and MRF4, all have bHLH domains. These proteins function by forming heterodimers with E-proteins and binding to the canonical E-box sequence CANNTG. Neuro D is expressed transiently in a subset of neurons in the central and peripheral nervous systems at the time of their terminal differentiation into mature neurons. Moreover, ectopic expression of Neuro D in Xenopus embryos induces premature differentiation of neuronal precursors and Neuro D can convert presumptive epidermal cells into neurons. The lack of NeuroD in the brain results in severe defects in development. Human mutations have been linked to a number of types of diabetes including type I diabetes mellitus and maturity-onset diabetes of the young. The calculated molecular weight of NEUROD1 is 39 kDa, but the modified NEUROD1 protein is about 45-50 kDa.

## Storage

**Storage:**  
Store at -80°C.  
**The product is shipped with ice packs. Upon receipt, store it immediately at -80°C**

**Storage Buffer:**  
PBS Only

For technical support and original validation data for this product please contact:

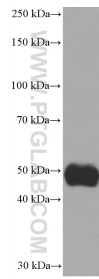
T: 4006900926

E: [Proteintech-CN@ptglab.com](mailto:Proteintech-CN@ptglab.com)

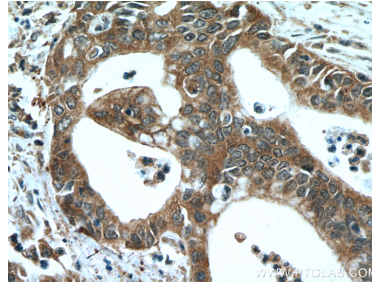
W: [ptgcn.com](http://ptgcn.com)

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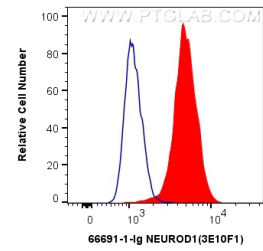
## Selected Validation Data



Y79 cells were subjected to SDS PAGE followed by western blot with 66691-1-Ig (NEUROD1 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 66691-1-PBS in a different storage buffer formulation.



Immunohistochemical analysis of paraffin-embedded human pancreas cancer tissue slide using 66691-1-Ig (NEUROD1 antibody) at dilution of 1:1000 (under 40x Lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 66691-1-PBS in a different storage buffer formulation.



1X10<sup>6</sup> SH-SY5Y cells were intracellularly stained with 0.5 ug Anti-Human NEUROD1 (66691-1-Ig, Clone:3E10F1) (red) labeled with FlexAble CoraLite® Plus 555 Antibody Labeling Kit for Mouse IgG1 (KFA022), or 0.5 ug Control Antibody. Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C). This data was developed using the same antibody clone with 66691-1-PBS in a different storage buffer formulation.