

For Research Use Only

# CoraLite®488-conjugated NEUROD1 Monoclonal antibody



Catalog Number:CL488-66691

## Basic Information

<b>Catalog Number:</b> CL488-66691	<b>GenBank Accession Number:</b> BC009046	<b>Purification Method:</b> Protein G purification
<b>Size:</b> 100ul , Concentration: 1667 µg/ml by Nanodrop;	<b>GeneID (NCBI):</b> 4760	<b>CloneNo.:</b> 3E10F1
<b>Source:</b> Mouse	<b>Full Name:</b> neurogenic differentiation 1	
<b>Isotype:</b> IgG1	<b>Calculated MW:</b> 356 aa, 40 kDa	
<b>Immunogen Catalog Number:</b> AG27606	<b>Observed MW:</b> 40-50 kDa	

## Applications

**Tested Applications:**  
FC (Intra)

**Species Specificity:**  
Human

## 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 -20°C. Avoid exposure to light. Stable for one year after shipment.

**Storage Buffer:**  
PBS with 50% Glycerol, 0.05% Proclin300, 0.5% BSA, pH 7.3.

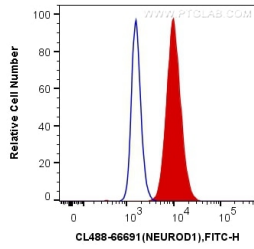
**Aliquoting is unnecessary for -20°C storage**

**\*\*\* 20ul sizes contain 0.1% BSA**

For technical support and original validation data for this product please contact:  
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA) E: proteintech@ptglab.com W: ptglab.com

**This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.**

## Selected Validation Data



1X10<sup>6</sup> SH-SY5Y cells were intracellularly stained with 0.4 ug CoraLite®488 Anti-Human NEUROD1 (CL488-66691, Clone:3E10F1) (red), or 0.4 ug Mouse IgG1 Isotype Control (CL488-66360, Clone: T1F8D3F10) (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).