

For Research Use Only

NEUROD1 Monoclonal antibody, PBS Only



Catalog Number: 66691-1-PBS

Basic Information

Catalog Number: 66691-1-PBS	GenBank Accession Number: BC009046	Purification Method: Protein A purification
Size: 100ug , Concentration: 1mg/ml by Nanodrop;	GeneID (NCBI): 4760	CloneNo.: 3E10F1
Source: Mouse	UNIPROT ID: Q13562	
Isotype: IgG1	Full Name: neurogenic differentiation 1	
Immunogen Catalog Number: AG27606	Calculated MW: 356 aa, 40 kDa	
	Observed MW: 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

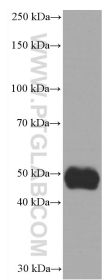
Storage:
Store at -80°C.

Storage Buffer:
PBS Only

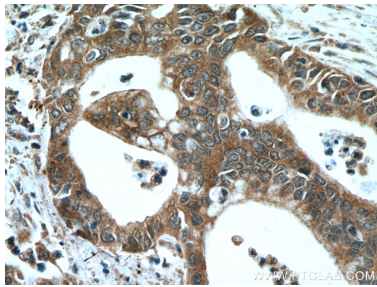
For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
E: proteintech@ptglab.com
W: ptglab.com

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

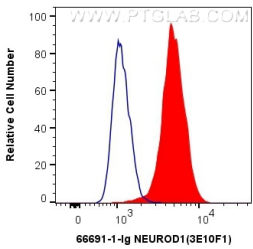
Selected Validation Data



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.



1X10⁶ 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.