For Research Use Only

CoraLite®594-conjugated NEUROD1 Monoclonal antibody

www.ptglab.com

Catalog Number: CL594-66691

Basic Information

Catalog Number: GenBank Accession Number:

CL594-66691 BC009046 GeneID (NCBI):

100ul, Concentration: 1000 ug/ml by 4760

Nanodrop: **UNIPROT ID:** Q13562 Mouse Full Name:

Isotype: neurogenic differentiation 1

lgG1 Calculated MW: Immunogen Catalog Number: 356 aa, 40 kDa AG27606 Observed MW:

40-50 kDa

Purification Method:

Protein G purification

CloneNo.: 3E10F1

Excitation/Emission maxima

wavelengths: 588 nm / 604 nm

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 Eproteins 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.

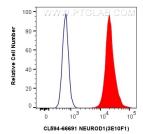
Storage

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

PBS with 50% Glycerol, 0.05% Proclin300, 0.5% BSA, pH 7.3.

Aliquoting is unnecessary for -20°C storage

Selected Validation Data



1x10^6 SH-SY5Y cells were intracellularly stained with 0.4 ug CoraLite®594-conjugated NEUROD1 Monoclonal antibody (CL594-66691, Clone:3E10F1) (red), or 0.4 ug CoraLite®594 Mouse IgG1 Isotype Control (1F8D3) (CL594-66360-1, Clone: 1F8D3) (blue). Cells were fixed and permeabilized with Transcription Factor Staining Buffer Kit (PF00011).