

CoraLite®594-conjugated NEUROD1 Monoclonal antibody

Catalog Number: CL594-66691

Basic Information

Catalog Number:

CL594-66691

Size:

1200 µg/ml

Source:

Mouse

Isotype:

IgG1

Immunogen Catalog Number:

AG27606

GenBank Accession Number:

BC009046

GeneID (NCBI):

4760

UNIPROT ID:

Q13562

Full Name:

neurogenic differentiation 1

Calculated MW:

356 aa, 40 kDa

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 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:

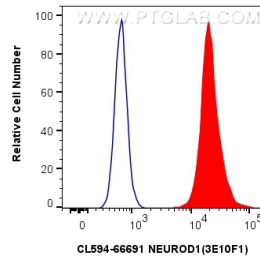
Store at -20°C. Avoid exposure to light. Stable for one year after shipment.

Storage Buffer:

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

Aliquoting is unnecessary for -20°C storage

Selected Validation Data



1x10⁶ 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).