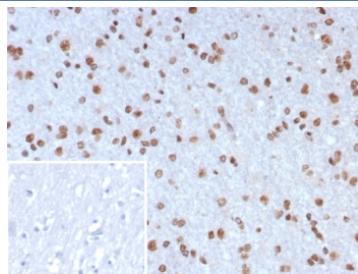


## NEUROG3 Antibody / Neurogenin 3 / NGN3 [clone NGN3/7698] (V4100)

Catalog No.	Formulation	Size
V4100-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 ug
V4100-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	20 ug
V4100SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

### Bulk quote request

Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG1, kappa
Clone Name	NGN3/7698
Purity	Protein A/G affinity
UniProt	Q9Y4Z2
Localization	Nucleus
Applications	Immunohistochemistry (FFPE) : 1-2ug/ml for 30 minutes at RT
Limitations	This NEUROG3 antibody is available for research use only.



IHC staining of FFPE human brain tissue with NEUROG3 antibody (clone NGN3/7698) Inset: PBS used in place of primary Ab (secondary Ab negative control). HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 20 min and allow to cool before testing.

### Description

This antigen is a transcription factor that interacts with NKX2-2 to regulate transcription of NEUROD1. The neurogenin family of proteins belongs to the basic helix-loop-helix (bHLH) superfamily and consists of Neurogenin 1, Neurogenin 2

and Neurogenin 3 (also designated ngn3). bHLH members are transcriptional regulators that determine cell fate. Neurogenin 3 is expressed in discrete regions of developing neurons and in the embryonic pancreatic islets of Langerhans. HNF-6 (hepatocyte nuclear factor 6) acts as a positive regulator of Neurogenin 3 by binding to and stimulating the neurogenin gene promoter. Neurogenin 3 is involved in the initial differentiation of the four islets cell types, while a network of transcription factors, including Hlx9b, Isl1, NeuroD, Nkx-2.2, Nkx-6.4, Pax-4, Pax-6, PDX-1 and Mash1, are required for final differentiation. Neurogenin 3 acts upstream of NeuroD in a bHLH cascade. Neurogenin 3 activates the expression of NeuroD at the onset of islet cell differentiation through box sequences E1 and E3 in the NeuroD promoter.

## Application Notes

Optimal dilution of the NEUROG3 antibody should be determined by the researcher.

## Immunogen

A recombinant partial protein (within amino acids 1-200) from the human protein was used as the immunogen for the NEUROG3 antibody.

## Storage

Aliquot the NEUROG3 antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.