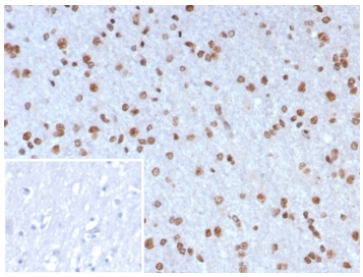
NEUROG3 Antibody / Neurogenin 3 / NGN3 [clone NGN3/7698] (V4100)

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 regulation 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 Hlxb9, 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.

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