

## NEUROG3 / Neurogenin 3 / NGN3 (Transcription Factor) Antibody

Mouse Monoclonal Antibody [Clone NGN3/1808]

Catalog No	Format	Size
50674-MSM1-P0	Purified Ab with BSA and Azide at 200ug/ml	20 ug
50674-MSM1-P1	Purified Ab with BSA and Azide at 200ug/ml	100 ug
50674-MSM1-P1ABX	Purified Ab WITHOUT BSA and Azide at 1.0mg/ml	100 ug

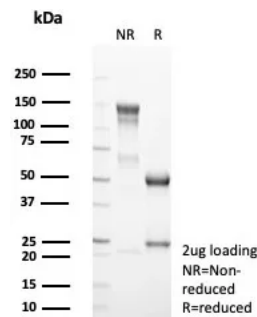
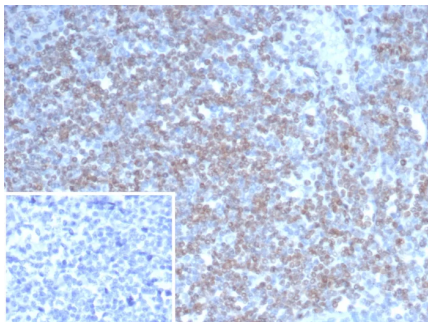
Applications	Tested Dillution	Note
Immunohistochemistry (IHC)	1-2ug/ml	30 min at RT. Staining of formalin-fixed tissues requires heating tissue sections in 10mM Tris with 1mM EDTA, pH 9.0, for 45 min at 95°C followed by cooling at RT for 20 minutes

### Product Details

<b>Clone</b>	NGN3/1808
<b>Gene Name</b>	NEUROG3
<b>Immunogen</b>	Recombinant fragment (around aa1-200) of human NEUROG3 protein (exact sequence is proprietary)
<b>Host</b>	Mouse
<b>Clonality</b>	Monoclonal
<b>Isotype / Light Chain</b>	IgG2b / Kappa
<b>Mol. Weight of Antigen</b>	23.54kDa
<b>Cellular Localization</b>	Nucleus.
<b>Species Reactivity</b>	Human
<b>Positive Control</b>	colon HeLa cells. Human fetal gut liver or heart.

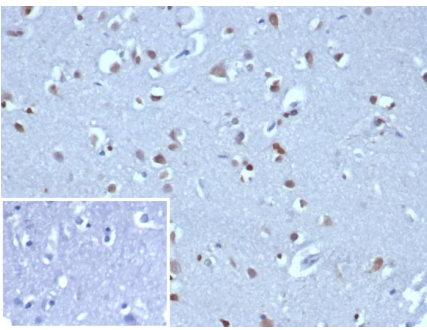
\*Optimal dilution for a specific application should be determined.

### Product Images for NEUROG3 / Neurogenin 3 / NGN3 (Transcription Factor) Antibody



Formalin-fixed, paraffin-embedded human tonsil stained with NEUROG3 Mouse Monoclonal Antibody (NGN3/1808) HIER: Tris/EDTA, pH9.0, 45min. 2°C: HRP-polymer, 30min. DAB, 5min.

SDS-PAGE Analysis NEUROG3 Mouse Monoclonal Antibody (NGN3/1808). Confirmation of Purity and Integrity of Antibody.



Formalin-fixed, paraffin-embedded human brain stained with NEUROG3 Mouse Monoclonal Antibody (NGN3/1808) Inset: PBS instead of primary antibody; secondary only negative control.

### Specificity & Comments

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 Hlx9, 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.

### Limitations and Warranty

This antibody is available for research use only and is not approved for use in diagnosis. There are no warranties, expressed or implied, which extend beyond this description. Company is not liable for any personal injury or economic loss resulting from this product.

### Supplied As

200ug/ml of Ab purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1.0mg/ml.

### Storage and Stability

Antibody with azide - store at 2 to 8°C. Antibody without azide - store at -20 to -80°C. Antibody is stable for 24 months. Non-hazardous. No MSDS required.

### Research Areas

Developmental Biology, Nuclear Marker, Stem Cell Differentiation