

## Neurogenin3 Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP2024A

### **Specification**

## Neurogenin3 Antibody (N-term) - Product Information

Application IF, WB, IHC-P,E

Primary Accession <u>O9Y4Z2</u>

Reactivity Human, Mouse

Host Rabbit
Clonality Polyclonal
Isotype Rabbit IgG
Antigen Region 40-69

## Neurogenin3 Antibody (N-term) - Additional Information

### **Gene ID 50674**

#### **Other Names**

Neurogenin-3, NGN-3, Class A basic helix-loop-helix protein 7, bHLHa7, Protein atonal homolog 5, NEUROG3, ATOH5, BHLHA7, NGN3

# **Target/Specificity**

This Neurogenin3 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 40-69 amino acids from the N-terminal region of human Neurogenin3.

#### **Dilution**

IF~~1:10~50 WB~~1:2000 IHC-P~~1:25

E~~Use at an assay dependent concentration.

#### **Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

#### Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

#### **Precautions**

Neurogenin3 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

# Neurogenin3 Antibody (N-term) - Protein Information

### Name NEUROG3





Synonyms ATOH5, BHLHA7, NGN3

**Function** Acts as a transcriptional regulator. Together with NKX2-2, initiates transcriptional activation of NEUROD1. Involved in neurogenesis. Also required for the specification of a common precursor of the 4 pancreatic endocrine cell types (By similarity).

### **Cellular Location**

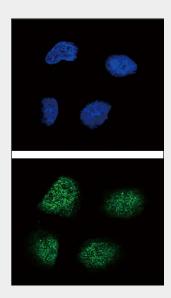
Nucleus {ECO:0000255|PROSITE-ProRule:PRU00981}.

# Neurogenin3 Antibody (N-term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

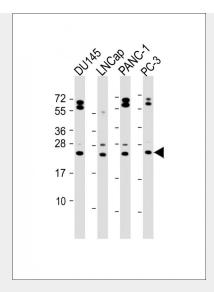
- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

## Neurogenin3 Antibody (N-term) - Images

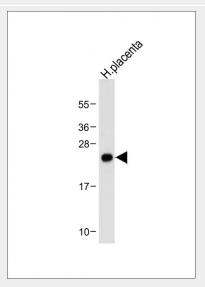


Confocal immunofluorescent analysis of Neurogenin3 Antibody (N-term) (Cat#AP2024a) with NCI-H460 cell followed by Alexa Fluor 488-conjugated goat anti-rabbit lgG (green). DAPI was used to stain the cell nuclear (blue).



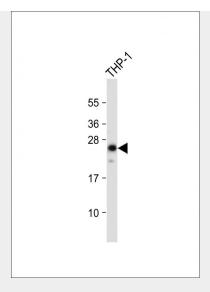


All lanes : Anti-Neurogenin3 Antibody (N-term) at 1:2000 dilution Lane 1: DU145 whole cell lysate Lane 2: LNCap whole cell lysate Lane 3: PANC-1 whole cell lysate Lane 4: PC-3 whole cell lysate Lysates/proteins at 20  $\mu$ g per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 23 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

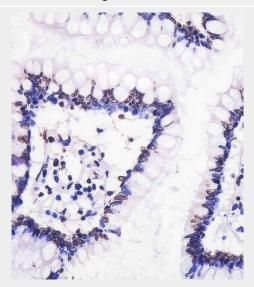


Anti-Neurogenin3 Antibody (N-term) at 1:500 dilution + Human placenta tissue lysate Lysates/proteins at 20  $\mu$ g per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 23 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



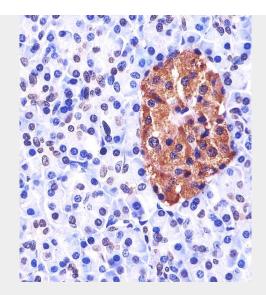


Anti-Neurogenin3 Antibody (N-term) at 1:2000 dilution + THP-1 whole cell lysate Lysates/proteins at 20  $\mu$ g per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 23 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



AP2024A staining Neurogenin3 in human small intestine tissue sections by Immunohistochemistry (IHC-P - paraformaldehyde-fixed, paraffin-embedded sections). Tissue was fixed with formaldehyde and blocked with 3% BSA for 0. 5 hour at room temperature; antigen retrieval was by heat mediation with a citrate buffer (pH6). Samples were incubated with primary antibody (1/25) for 1 hours at 37°C. A undiluted biotinylated goat polyvalent antibody was used as the secondary antibody.





AP2024A staining Neurogenin3 in human pancreas tissue sections by Immunohistochemistry (IHC-P - paraformaldehyde-fixed, paraffin-embedded sections). Tissue was fixed with formaldehyde and blocked with 3% BSA for 0. 5 hour at room temperature; antigen retrieval was by heat mediation with a citrate buffer (pH6). Samples were incubated with primary antibody (1/25) for 1 hours at 37°C. A undiluted biotinylated goat polyvalent antibody was used as the secondary antibody.

## Neurogenin3 Antibody (N-term) - Background

Neurogenin-3 belongs to a family of basic helix-loop-helix transcription factors involved in the determination of neural precursor cells in the neuroectoderm. Neurogenin-3 also required for the specification of a common precursor of the 4 pancreatic endocrine cell types. Defects in NEUROG3 are the cause of congenital malabsorptive diarrhea 4 (DIAR4). DIAR4 is an autosomal recessive disorder characterized by generalized malabsorption and a paucity of enteroendocrine cells.

## Neurogenin3 Antibody (N-term) - References

Heremans, Y., et al., J. Cell Biol. 159(2):303-312 (2002). Sommer, L., et al., Mol. Cell. Neurosci. 8(4):221-241 (1996).