

### **NGN2 Antibody**

Catalog # ASC11571

### **Specification**

### **NGN2 Antibody - Product Information**

Application Primary Accession Other Accession Reactivity Host Clonality

Isotype Calculated MW

**Application Notes** 

WB, IF, E 09H2A3

NP\_076924, 31077092 Human, Mouse, Rat

Rabbit Polyclonal

lgG

30 kDa KDa

NGN2 antibody can be used for detection of NGN2 by Western blot at  $1 - 2 \mu g/mL$ . For immunofluorescence start at  $20 \mu g/mL$ .

# **NGN2 Antibody - Additional Information**

Gene ID **63973** 

**Target/Specificity** 

NEUROG2; NGN2 antibody is predicted to not cross-react with neurogenin 1.

#### **Reconstitution & Storage**

NGN2 antibody can be stored at 4°C for three months and -20°C, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.

#### **Precautions**

NGN2 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

### **NGN2 Antibody - Protein Information**

Name NEUROG2

Synonyms ATOH4, BHLHA8, NGN2

#### **Function**

Transcriptional regulator. Involved in neuronal differentiation. Activates transcription by binding to the E box (5'- CANNTG-3').

## **Cellular Location**

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

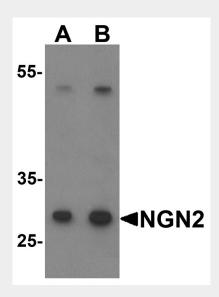
#### **NGN2 Antibody - Protocols**



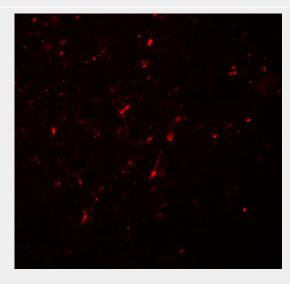
Provided below are standard protocols that you may find useful for product applications.

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

**NGN2 Antibody - Images** 



Western blot analysis of NGN2 in mouse small intestine tissue lysate with NGN2 antibody at (A) 1 and (B) 2  $\mu$ g/mL.



Immunofluorescence of NGN2 in human brain tissue with NGN2 antibody at 20 µg/mL.

# NGN2 Antibody - Background

NGN2 Antibody: Neurogenin-2 (NGN2) is a neural-specific basic helix-loop-helix (bHLH) transcription factor that can specify a neuronal fate on ectodermal cells and is expressed in neural progenitor cells within the developing central and peripheral nervous systems. NGN2 is thought to





Tel: 858.875.1900 Fax: 858.875.1999

work with Nurr1 to play a role in the differentiation and survival of midbrain dopaminergic neurons. It has also been suggested for use in human embryonic neural progenitors as a graft for spinal cord injuries

## **NGN2 Antibody - References**

Sommer L, Ma Q, and Anderson DJ. Neurogenins, a novel family of atonal-related bHLH transcription factors, a putative mammalian neuronal determination genes that reveal progenitor cell heterogeneity in the developing CNS and PNS. Mol. Cell Neurosci. 1996; 8:221-41. Fode C, Gradwohl G, Morin X, et al. The bHLH protein NEUROGENIN 2 is a determination factor for epibranchial placode-derived sensory neurons. Neuron 1998; 20:483-94. Andersson EK, Irvin DK, Ahlsio J, et al. Ngn2 and Nurr1 act in synergy to induce midbrain dopaminergic neurons from expanded neural stem and progenitor cells. Exp. Cell. Res. 2007; 313:1172-80.

Perrin FE, Boniface G, Serguera C, et al. Grafted human embryonic progenitors expressing neurogenin-2 stimulate axonal sprouting and improve motor recovery after severe spinal cord injury. PLoS One 2010; 5:e15914.