

NGN2 Antibody

Catalog # ASC11571

Specification

NGN2 Antibody - Product Information

Application Primary Accession Other Accession Reactivity Host

Clonality Isotype

Calculated MW

Application Notes

WB, IF <u>Q9H2A3</u>

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}.

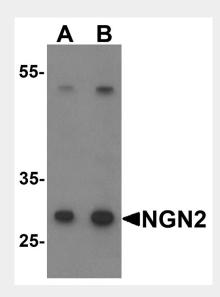
NGN2 Antibody - Protocols



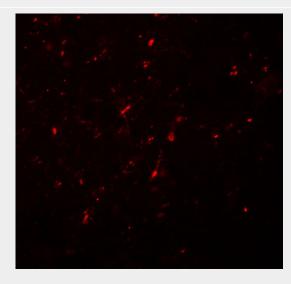
Provided below are standard protocols that you may find useful for product applications.

- 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 μ 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





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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.