

Neuro D2 (A-13): sc-107811

BACKGROUND

Members of the myogenic determination family are basic helix-loop-helix (bHLH) proteins that can be separated into two classes, both of which work together to activate DNA transcription. Class A proteins include the ubiquitously expressed E-box binding factors, namely E2A, ITF-2 and HEB, while class B proteins, such as MyoD, myogenin and Neuro D (BETA2), are transiently expressed and exhibit a much more limited tissue distribution. Working in opposition to these positively acting factors are a specialized group of basic helix-loop-helix (bHLH) transcription factors that function as dominant negative regulators and are involved in cell lineage determination and differentiation. Neuro D2 (neurogenic differentiation 2), also known as NDRF, NEUROD2 or bHLHa1, is a 382 amino acid nuclear protein that contains one bHLH domain and functions to induce neurogenic differentiation, playing an important role in the maintenance and determination of cell fate.

REFERENCES

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2. Tamimi, R.M., Steingrimsson, E., Montgomery-Dyer, K., Copeland, N.G., Jenkins, N.A. and Tapscott, S.J. 1997. NeuroD2 and NeuroD3 genes map to human chromosomes 17q12 and 5q23-q31 and mouse chromosomes 11 and 13, respectively. *Genomics* 40: 355-357.
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CHROMOSOMAL LOCATION

Genetic locus: NEUROD2 (human) mapping to 17q12; NeuroD2 (mouse) mapping to 11 D .

SOURCE

Neuro D2 (A-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Neuro D2 of human origin.

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin. Also available as TransCruz reagent for Gel Supershift and ChIP applications, sc-107811 X, 200 µg/0.1 ml.

Blocking peptide available for competition studies, sc-107811 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Neuro D2 (A-13) is recommended for detection of Neuro D2 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for Neuro D2 siRNA (h): sc-94081, Neuro D2 siRNA (m): sc-149930, Neuro D2 shRNA Plasmid (h): sc-94081-SH, Neuro D2 shRNA Plasmid (m): sc-149930-SH, Neuro D2 shRNA (h) Lentiviral Particles: sc-94081-V and Neuro D2 shRNA (m) Lentiviral Particles: sc-149930-V.

Neuro D2 (A-13) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of Neuro D2: 41 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.


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Try **Neuro D2 (G-10): sc-365896**, our highly recommended monoclonal alternative to Neuro D2 (A-13).